

# **TRANSCRIPT OF PROCEEDINGS**

ASSASSINATION RECORDS REVIEW BOARD

In re:

PRESIDENT JOHN F. KENNEDY

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**CORRECTED TRANSCRIPT**

Deposition of DR. J. THORNTON BOSWELL

Pages 1 thru 223

College Park, Maryland  
February 26, 1996

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## BEFORE THE

## ASSASSINATION RECORDS REVIEW BOARD

In Re:

PRESIDENT JOHN F. KENNEDY

College Park, Maryland  
Monday, February 26, 1996

The deposition of DR. J THORNTON BOSWELL,  
called for examination by counsel for the Board in  
the above-entitled matter, pursuant to notice, at  
8601 Adelphi Road, College Park, Maryland, convened  
at 10:02 a.m., before Robert H. Haines, a notary  
public in and for the State of Maryland, when were  
present on behalf of the parties:

## APPEARANCES:

JEREMY GUNN, ESQ., General Counsel  
Assassination Records Review Board  
600 E Street, N.W.  
2nd Floor  
Washington, D.C. 20530

DAVID G. MARWELL, Executive Director

DOUGLAS P. HORNE, Senior Analyst

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LAURA DENK

C O N T E N T SWITNESSEXAMINATION BY COUNSEL FOR:  
ARRB

Dr. Boswell

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## 1                   P R O C E E D I N G S

2                   MR. GUNN: We are assembled in the  
3 National Archives Annex at College Park, Maryland,  
4 to take the deposition of Dr. J Thornton Boswell.  
5 Dr. Boswell was one of the doctors who performed  
6 the autopsy on President Kennedy.

7                   My name is Jeremy Gunn. I'm the general  
8 counsel of the Assassination Records Review Board.  
9 Sitting next to me is Doug Horne, a member of the  
10 Review Board staff. Also in the room is David  
11 Marwell, the Executive Director of the Review  
12 Board. We are expecting at some point today we  
13 will be joined by some other people, and I will  
14 introduce them when they come in.

15                  Whereupon,

16                  DR. J THORNTON BOSWELL

17 was called as a witness and, having been first duly  
18 sworn, was examined and testified as follows:

19                  EXAMINATION BY COUNSEL FOR THE

20                  ASSASSINATION RECORDS REVIEW BOARD

21                  BY MR. GUNN:

22 Q               I would like to show you a couple of

1 documents, Dr. Boswell, and ask you whether you  
2 have seen them previously. The first one on its  
3 face appears to be a letter dated December 7, 1995,  
4 to Dr. Boswell from David Marwell.

5 A Yes.

6 Q Attached to that letter is a subpoena.

7 A Yes.

8 Q You have seen the document before?

9 A I have.

10 Q I'd like to show you a letter--

11 MR. GUNN: I will state for the record  
12 that the document I have just shown to Dr. Boswell  
13 is Exhibit No. MD 102. The second document that I  
14 am handing to Dr. Boswell is Exhibit MD 103, and  
15 that is a letter dated January 2, 1996, from myself  
16 to Dr. Boswell.

17 BY MR. GUNN:

18 Q Have you seen that letter before?

19 A Yes, I have.

20 Q And is it your understanding that you are  
21 appearing at this deposition pursuant to the  
22 subpoena that was issued and the letter clarifying

1 and straightening out the date?

2 A Yes.

3 Q Dr. Boswell, you were invited to bring an  
4 attorney with you today if you chose. Did you  
5 understand that you had that option if you so  
6 desired?

7 A Yes.

8 Q And did you just decide not to bring an  
9 attorney?

10 A Correct.

11 Q Dr. Boswell, at the completion of the  
12 deposition, you will have an opportunity to read  
13 the transcript of the deposition and make any  
14 corrections in it that you believe straighten or  
15 clarify what you said in the deposition today. The  
16 deposition is being tape-recorded and is being  
17 taken by stenographic notes, and those records will  
18 be kept.

19 Dr. Boswell, I am going to try to ask you  
20 clear questions today. If there is any time that  
21 you don't understand or you'd like me to rephrase  
22 the question, don't hesitate to ask me, and I will

1 try to rephrase it.

2 We are going to be working in the  
3 deposition today with a pre-numbered exhibit list,  
4 so the order of the documents that I will give to  
5 you will not necessarily reflect a sequential  
6 order. So, for example, the first two documents  
7 you were shown were Exhibits 102 and 103. The  
8 exhibit numbers will be kept consistent throughout  
9 our work in the medical evidence in this matter.

10 Dr. Boswell, I'd like to ask you for your  
11 indulgence to not discuss the issues that we are  
12 talking about today until the Assassination Records  
13 Review Board completes its work on the medical  
14 evidence. You should, of course, feel free to  
15 discuss matters pertaining to the autopsy to any  
16 extent that you wish, but in terms of the questions  
17 that you are being asked here and your responses to  
18 those questions, we would appreciate your not  
19 discussing those issues. We expect that our work  
20 in this area will probably be completed by the end  
21 of this calendar year.

22 Is that acceptable to you?

1           A     Yes.

2           Q     Thank you. I appreciate that.

3                 We are hoping that this deposition  
4     provides you with an opportunity to freely state  
5     and explain your understanding of the events that  
6     transpired at the time of the autopsy and some  
7     events that happened immediately thereafter. If at  
8     any time you wish to elaborate on a question,  
9     please don't hesitate to do so.

10              Dr. Boswell, did you bring any records  
11    with you today pursuant to the subpoena marked  
12   Exhibit 102?

13              A     I did not. I have no records. I have a  
14   large file, but they're all crank material that  
15   I've gotten through the mail and so forth.

16              Q     With the letters that you're referring to,  
17   have you written back to people in response to  
18   those letters?

19              A     No.

20              Q     Did you take any notes or prepare any  
21   diagrams during the course of the autopsy of  
22   President Kennedy?

1           A     Yes.

2           Q     Do you have any of those notes still in  
3 your possession?

4           A     No.

5           Q     Dr. Boswell, did you discuss any  
6 substantive matters relating to the deposition  
7 today with anyone? And by that, I mean did you  
8 discuss with someone answers that you might give to  
9 questions or how you would formulate answers to  
10 questions?

11          A     No.

12          Q     You are aware that Dr. Humes had his  
13 deposition taken here approximately two weeks ago?

14          A     Yes.

15          Q     Did you discuss the deposition with him  
16 after he completed that testimony?

17          A     No.

18          Q     Have you discussed the fact that you are  
19 being deposed with Dr. Pierre Finck?

20          A     No.

21          Q     Do you know where Dr. Finck is now?

22          A     He's in Europe, as far as I know.

1           Q    Other than with anyone connected with the  
2 Assassination Records Review Board, did you discuss  
3 the fact that you would be having your deposition  
4 taken with any other official or representative of  
5 the United States Government?

6           A    No.

7           MR. GUNN: I'd like to state that we have  
8 been joined by two other people since the  
9 deposition began: first by Colonel Tim Wray, and  
10 second by Laura Denk. Both of them are members of  
11 the Review Board staff.

12           BY MR. GUNN:

13           Q    Dr. Boswell, I'd like to take you back to  
14 the time of the autopsy in 1963 and ask you whether  
15 you received at any point, directly or indirectly,  
16 any orders or instructions telling you what you  
17 could or could not say about the autopsy?

18           A    No.

19           Q    Did you ever come to believe that there  
20 was anyone who had a preference that you talk or  
21 not talk about the autopsy?

22           A    Well, it was just standard military

1 procedure that it be a limited--I'd be limited to  
2 what I would do and to whom I would talk and so  
3 forth. I was involved in an awful lot of  
4 investigations, the Warren Commission and people  
5 like that, and they, I'm sure, at some point told  
6 us not to discuss some things that they were  
7 working on. I at one point requested--at some  
8 point I was sent down by the Justice Department to  
9 New Orleans in the Clay Shaw trial, and I had  
10 instructions from the attorneys down there.

11 At some point later on, I was asked by--  
12 names, I have to think hard now to remember names.  
13 One of the attorneys for the Justice Department  
14 asked that I write them a letter and request a  
15 civilian group be appointed by the Justice  
16 Department, I believe, or the President or  
17 somebody. And I did write a letter to him, Carl  
18 Eardley. You have a copy of that, I think,  
19 probably. And I'm trying to think. I did call the  
20 bureau at some point and request permission to  
21 discuss the autopsy. I guess it was the House  
22 Review Committee subpoenaed us or called us in or

1 something, and I think I called the bureau and  
2 asked--I was out of the Navy by that time--and  
3 asked about, you know, what I could say and so  
4 forth.

5           The problem was I don't think Jim or  
6 Pierre or I had any question about being able to  
7 say anything we wanted to at any time, except that  
8 Jim had promised George Burkley, the President's  
9 physician, that we would not discuss the adrenals.  
10 And we had to always be very cautious about talking  
11 about that and with whom we spoke about it. I  
12 think he had promised George Burkley that we would  
13 not discuss the adrenals until all the then living  
14 members of the Kennedy family were dead, or  
15 something like that. I don't remember. He made  
16 that promise. I didn't, because I never talked to  
17 George Burkley. And at a point about a year-and-a-  
18 half ago, we got together with the AMA, and at that  
19 time Jim agreed that I could--because other people  
20 had been talking about the adrenals, he agreed that  
21 since I had not made a promise to George Burkley, I  
22 could talk about it. And so since then we've been

1 pretty straightforward with the few people we've  
2 talked with about that.

3 Q In your last answer, you referred to the  
4 House Committee. Were you referring to the House  
5 Select Committee on Assassinations?

6 A Yes.

7 Q Why did you call the bureau--and I assume  
8 by that--let me ask the question first. By the  
9 bureau, what were you referring to?

10 A The Bureau of Medicine and Surgery.

11 Q And why did you contact the Bureau of  
12 Medicine and Surgery to determine whether you could  
13 speak to the House Select Committee?

14 A You know, that was, what, 25 years ago,  
15 20-plus years ago, and I don't have a firm memory  
16 of why. I suspect it was because of the adrenal  
17 situation.

18 Q But other than with respect to the  
19 adrenals, you're aware of no orders or instructions  
20 or preferences that were ever stated by anyone in  
21 the U.S. Government on discussion of the autopsy;  
22 is that correct?

1       A    I was an employee of the medical school  
2 there at Bethesda. That's a euphemism. The  
3 medical school at that time was not a true medical  
4 school. It was a training place for technologists,  
5 mainly. And we had a commanding officer by the  
6 name of Stover, and I'm sure that he instructed us  
7 immediately after the autopsy, just cautioned us  
8 about publicity and so forth. But we were never  
9 given any instructions about not being able to talk  
10 to anybody or anything.

11      Q    Are you aware of any person connected with  
12 the autopsy who received any orders not to discuss  
13 any matters relating to the autopsy?

14      A    No, because they blabbed from day one.  
15 Some of those corpsmen did. And they made some  
16 terrible mistakes and statements.

17      Q    Are there any mistakes in the statements  
18 of the corpsmen that come to mind now that you  
19 think should be corrected?

20      A    Well, one was about the way the body  
21 arrived. There have been many stories about the  
22 casket that it came in, the wrappings around the

1 body, and all those were distorted. The true fact  
2 was that the casket was a bronze casket that had a-  
3 -when it arrived, it had a broken handle, and that  
4 had to be taken out of--he was brought in the  
5 morgue in that. And the casket was removed by the-  
6 -by Gawlers, and then another one was brought in.  
7 And all kinds of stories were written about how  
8 first there was no body and no casket, and  
9 different kinds of caskets were described. Then  
10 the wrappings, the President arrived wrapped in  
11 sheets and a pillowcase around his head, and  
12 different stories were published about that.

13 Jim Humes, immediately when we removed the  
14 wrappings, stuck those--we had a washing machine in  
15 the morgue, and he stuck those in the washing  
16 machine, said he didn't want those appearing in a  
17 barn out in Kansas sometime, and they were all  
18 laundered.

19 Just offhand, I'm sorry, I can't think of  
20 other stories, but there were a lot.

21 Bob Karnei, he was later--when he retired,  
22 he was the commanding officer at the AFIP. He

1 spoke with Livingstone, who has written those three  
2 books, and he told several different stories about  
3 the adrenals, none of which were true.

4           Memories, you know, change, have changed  
5 over the years, and I'm sure a lot of the stuff  
6 that I've heard is incorporated in my memory now.  
7 But some of those guys, their memories changed  
8 fast.

9           Q     Is there anything that you can think of  
10 that would keep you in any way from being able to  
11 tell the full truth, to the best of your  
12 recollection, today?

13          A     No. Just my memory loss is the only  
14 thing.

15          Q     What was your role in the autopsy of  
16 President Kennedy?

17          A     Well, I got a call from Bruce Smith at the  
18 AFIP. I think--I'm not sure at all about the time,  
19 but I think it was around 4 o'clock in the  
20 afternoon, and he said that the President was being  
21 brought to Bethesda for an autopsy. And I told him  
22 that I thought that was foolish. I said, Why isn't

1 he brought there at the AFIP where you have more  
2 facilities? And he says George Burkley or  
3 somebody--I think it was George Burkley that had  
4 requested it come to Bethesda. And we discussed  
5 this over the phone for a little while, and then  
6 after it was clear that we were going to do the  
7 autopsy, I decided that--well, first I tried to  
8 call Jim. Jim was on leave at the time. He was on  
9 a short vacation. And I knew that they were having  
10 a party that night, so I was reluctant. But I  
11 called him. I think I didn't get him.

12 I don't know how familiar you are with the  
13 Naval Medical Center, but there are a number of  
14 commands there, all under the central command. And  
15 I think the first place I went immediately was to  
16 the commanding officer of the hospital and told him  
17 what the situation was. And by this time,  
18 everybody knew that Kennedy had been killed and  
19 that they were on their way back. And the  
20 commanding officer of the hospital and I then began  
21 to arrange for various people to come in and  
22 security around the hospital and that sort of

1       thing.

2              Then we went to the commanding officer of  
3       the center, I think the commanding officer of the  
4       hospital and I. First he called in a lot of other  
5       heads of departments, medical photography and  
6       X-ray. I think that was it. And then he and I  
7       went up to the commanding officer of the center,  
8       and we discussed it, and he also discussed about  
9       security and our ability to do this and so forth.  
10      And at some point later that afternoon, I was able  
11     to get in touch with Jim Humes, and we discussed  
12     how we'd do it. And then I was moonlighting at the  
13     time, and so I went over to Suburban Hospital about  
14     6 o'clock and did my work over there for a couple  
15     of hours, and I think I arrived back at the Navy  
16     7:30 or so, at which point Jim arrived. And then I  
17     think the body arrived around 8:00.

18              And we had agreed that Jim would be the  
19       senior prosecutor. I was Chief of Pathology, but he  
20       was my superior because he was the Chief of  
21       Laboratory. And I just thought it was appropriate  
22       that such an important case as this, that he should

1 be the senior prosecutor. And he did not agree  
2 early but then did agree to that. And we discussed  
3 having a forensic pathologist with us, and we  
4 decided it was wise to do that. We considered  
5 whether it should be a civilian or military, and we  
6 decided in view of everything that had happened to  
7 that point that it would be military. And I knew  
8 Pierre Finck because I had worked with him at the  
9 AFIP. And so I called him.

10 I don't think he arrived at the time we  
11 started the autopsy. He arrived a little bit later  
12 than that, but before we had made any incisions.  
13 And then it was pretty much a team effort. Jim and  
14 I actually did the autopsy, and Pierre was just  
15 more or less observing and recommending and  
16 advising and so forth.

17 We did--I think we each did some of the  
18 dissection, and I did most of the recording,  
19 unfortunately. I drew the pictures. Jim made much  
20 of the decisions about the X-ray, X-rays,  
21 photographs, although we discussed back and forth  
22 what we should do and so forth.

1           That was about my role. If you have  
2 questions as far as what Jim described, maybe you  
3 could ask me, and I could elaborate or something.

4           Q     One question I had on your answer where  
5 you said, if I recall correctly, that unfortunately  
6 you were in charge of recording things. Why did  
7 you say "unfortunately"?

8           A     Because of all the people who've described  
9 my drawing there, most of our problems have  
10 resulted from that.

11          Q     When you say drawing, are you referring to  
12 a document I'm now about to show you as being  
13 Exhibit 1?

14          A     Yes.

15          Q     While you're looking at Exhibit No. 1,  
16 were you the person who filled in the measurements  
17 that are provided on the first page?

18          A     Most of this writing is mine.

19          Q     You're referring to the bottom half of the  
20 page?

21          A     The diagrams and the labeling of that.  
22 Some of these measurements are, but I see some

1 writing here that's not mine. So I presume that  
2 one of the autopsy assistants must have written  
3 some of the numbers.

4 Q Now you're referring to the top half of  
5 the first page of Exhibit 1?

6 A Correct.

7 Q So where there are measurements for the  
8 heart, for example, and for the spleen; is that  
9 correct?

10 A Yes. I think that Jim was probably  
11 measuring and reading these numbers off, and  
12 somebody else was writing these down. Jim was  
13 making these measurements from the--where the  
14 gunshot wounds are from various bony prominences.  
15 He was reading those off, and I was writing all  
16 these in.

17 Q In your last answer, first you were  
18 speaking of the measurements or the weights of the  
19 organs as being measured by Dr. Humes and somebody  
20 else writing them down, and then for the  
21 measurements on the bottom half of the page near  
22 the diagrams, that Dr. Humes is the one who made

1 the measurements and that you recorded them.

2 A Right.

3 Q Is that correct?

4 A Yes. In this second diagram, this whole  
5 thing is mine.

6 Q You're referring to the second page of  
7 Exhibit 1?

8 A Right, the skull injuries and the bone  
9 fragments.

10 Q Okay. We'll come back to those a little  
11 bit later.

12 I'd like to show you a document that is  
13 Exhibit 26, which I will state appears on its face  
14 to be a memorandum from Andy Purdy to Jim Kelly and  
15 Kenneth Klein, with the title "Notes of Interview  
16 with Dr. J Thornton Boswell, August 17, 1977,  
17 National Orthopedic Hospital, Arlington, Virginia."

18 Dr. Boswell, have you seen the document  
19 previously that is now marked Exhibit 26?

20 A Many years ago. It must have been in that  
21 year, 1977.

22 Q Were you at one point interviewed by staff

1 members from the House Select Committee on  
2 Assassinations?

3 A Yes.

4 Q And would it be fair to say that, to the  
5 best of your recollection, Exhibit 26 would appear  
6 to be notes taken from that interview with those  
7 staff members?

8 A True.

9 Q I'd like to draw your attention to page 2  
10 of Exhibit 26, and I'd like just to ask you to read  
11 for a moment the full paragraph that's in the  
12 center of the page, beginning with the words "Dr.  
13 Boswell had been concerned" and going through the  
14 end of that paragraph.

15 [Pause.]

16 BY MR. GUNN:

17 Q You've had a chance to read that now, Dr.  
18 Boswell?

19 A I have.

20 Q Now, we all know that when people record  
21 what other people say, things are sometimes exactly  
22 correct and sometimes the nuance is off. I'd just

1 like to ask you whether in reading that paragraph  
2 any portion of it seems to you to be inaccurate, to  
3 the best of your recollection?

4 A I'm not sure about Robert McNamara. I see  
5 this now, and whether I said that or whether that  
6 was true or not, I don't know. I know that Dr.  
7 Burkley and other people were running around up in  
8 the tower with Mrs. Kennedy, but whether it was  
9 McNamara or not, at this point I don't know.

10 Q "At this point," you mean in 1996?

11 A Right.

12 Q Was it your impression in 1963 that Dr.  
13 Burkley was supervising what was going on in the  
14 autopsy room?

15 A Well, he wasn't supervising very closely.  
16 We were acting on certain of his instructions.  
17 Initially, Jim--at this time, I can't remember how  
18 Jim got his instructions from Burkley. I don't  
19 know whether Jim actually went upstairs to see  
20 Burkley or whether he came down. I never saw  
21 Admiral Burkley in the morgue. But at some point,  
22 Jim understood that we were to do a limited autopsy

1 to find--I think the initial thing that they told  
2 us was that we were to find the bullets, that they  
3 had captured the assailant, and that that's all  
4 they needed. And Jim argued and said that that  
5 was--you know, we couldn't do that kind of an  
6 autopsy. But we started out just with the idea  
7 that we were going to do an external examination  
8 and then we were going to do a limited internal  
9 examination. But at a point shortly after we  
10 started, it was agreed that we would do a complete  
11 autopsy. But I don't know how Jim got those  
12 instructions, whether he left the morgue and went  
13 up to see Burkley or whether Burkley came down or  
14 whether he sent a messenger. There was just too  
15 many things going on, I guess, that I wasn't aware  
16 of how that all happened.

17 Q Was it your understanding that the  
18 instructions about the scope of the autopsy were,  
19 however, coming from Dr. Burkley?

20 A Oh, yes.

21 Q If I understood you correctly, you said  
22 that you have no recollection of Dr. Burkley being

1      in the morgue. Is that correct?

2      A    I don't remember him being in the morgue  
3 at all. Now, he could very well have been in there  
4 very briefly early in the autopsy, but I'm sure  
5 that he was upstairs with Mrs. Kennedy most of the  
6 evening.

7      Q    Ultimately, did it seem to you as if a  
8 complete autopsy had been performed on President  
9 Kennedy? \*

10     A    Well, a generally complete autopsy was  
11 done. We did not do some of the more radical  
12 things that you do in forensic autopsies, like  
13 remove limbs or large portions of spine and that  
14 sort of thing. But, otherwise, a complete autopsy  
15 was done.

16     Q    Did you ever understand that there were  
17 any orders or instructions to limit the scope of  
18 the autopsy of the brain?

19     A    No.

20     Q    Did you ever understand that there were  
21 any orders or instructions to limit the autopsy of  
22 the organs of the neck?

1           A     No.

2           Q     Were the organs of the neck dissected?

3           A     Yes.

4           Q     Did you hear anyone at any point during  
5     the autopsy request to examine the clothing that  
6     President Kennedy was wearing at the time he was  
7     shot?

8           A     We all discussed the clothing. It was  
9     made--I guess we asked where the clothing was. I  
10    certainly remember Pierre asking about the  
11    clothing. But we didn't know where the--we knew  
12    that he had been in the hospital. He had arrived  
13    in our hospital in sheets, so we assumed that  
14    either the clothing was down there or was in  
15    transit, and we were not concerned about it at that  
16    point. But the clothing became available to us; it  
17    may have been several days or weeks later.

18          Q     Wouldn't it be standard practice in a  
19    forensic autopsy to have the clothing available for  
20    inspection during the autopsy?

21          A     Well, under normal circumstances, but  
22    these were not normal circumstances. I mean, the

1 body was transferred from Dallas and everything,  
2 and we certainly understood that that was not  
3 feasible. But then Jim made the decision early in  
4 the evening that we had to talk with the doctors  
5 who had done the examination in Dallas and did  
6 subsequently in the morning talk with them and  
7 discuss the wounds and clothing and so forth.

8 Q When was the first conversation with  
9 doctors in Dallas, as best you recall? \*

10 A Saturday morning.

11 Q Do you know of any reason that they were  
12 not contacted on Friday night during the autopsy?

13 A I guess just the fact that we were pretty  
14 well tied up all night. It would have been--it was  
15 midnight after--when we finished, and Jim wrote up  
16 the autopsy. I followed him home, and then he took  
17 all of our notes to his house, and then he wrote up  
18 the autopsy before he went to bed. The three of us  
19 separated, and I don't think we discussed calling  
20 Dallas at that hour of the night.

21 Q Do you recall Dr. Finck asking to examine  
22 the clothing during the autopsy?

1           A   Not specifically.

2           Q   So as best you recall, there was a  
3 discussion of the clothing, but not a request to  
4 see the clothing. Would that be fair?

5           A   Right.

6           Q   Do you recall there being any requests  
7 being made by you or anyone else to other people  
8 who were there regarding shell fragments, bullets,  
9 anything else that would have been useful to see  
10 during the course of the autopsy?

11          A   I know there was discussion because there  
12 were some security people in the morgue and on the  
13 telephone--the telephone was on the wall right at  
14 the head of the morgue table where we were working.  
15 And I remember them telling us that a bullet had  
16 been found, that bone fragments had been found, and  
17 I believe that they were being transported to  
18 Washington separately. And the bone fragments  
19 eventually came into the morgue that night. The  
20 bullet may. I'm not sure about that.

21          Q   Do you remember seeing any bullets during  
22 the course of the autopsy?

1           A     Fragments. In the autopsy we found very  
2 minute fragments, mostly on the X-rays.

3           Q     So this would be something more like  
4 particles or slivers, not--

5           A     Very small.

6           Q     Okay.

7           A     I'm not sure when I saw the bullet that  
8 was sent from Dallas. I remember seeing it at some  
9 point, but whether it was during the autopsy or  
10 during the Warren Commission investigation, I'm not  
11 sure.

12          Q     Did you understand at any point during the  
13 course of the autopsy that anyone wanted the  
14 autopsy to be expedited?

15          A     No.

16          Q     So you didn't understand that you were in  
17 any rush or under any compulsion to hurry?

18          A     Not at all.

19          Q     Did you ever hear any instructions or  
20 communications regarding or restricting the scope  
21 of the autopsy other than what you've already said?

22          A     No. It was always an extension of the

1 autopsy rather than further restrictions.

2 Q Prior to the time you first saw President  
3 Kennedy's body, had you heard any communications  
4 about the nature of the wounds that he had  
5 suffered?

6 A I don't think specifically. I think just  
7 the fact that he had a head wound.

8 Q The doctors in Dallas who had treated  
9 President Kennedy had a news conference on the  
10 afternoon of November 22nd that would have been at  
11 approximately 4:15 to 4:30 Washington time. Had  
12 you heard any communications about what those  
13 doctors had said during the press conference?  
*earlier  
that is time  
white house  
distributed  
transmits  
It was on  
radio & TV  
before press*

14 A No.

15 Q Do you know whether Dr. Humes had received  
16 any information prior to the beginning of the  
17 autopsy about the nature of the wounds on President  
18 Kennedy?

19 A I'm almost sure that he didn't.

20 Q Have you ever heard him say that he had  
21 any information prior to the beginning of the  
22 autopsy?

1 A No.

2 Q Are you familiar with the name of Dr.  
3 Robert Livingston?

4 A Yes. Livingstone, I believe it is.

5 Q I'm referring to a person formerly  
6 affiliated with the National Institute of Mental  
7 Health, not Harry Livingstone.

8 A Oh. No.

9 Q You don't know the name of Dr. Robert  
10 Livingston?

11 A I don't believe so.

12 Q Did you or Dr. Humes ever use the  
13 telephone in the autopsy room during the course of  
14 the autopsy?

15 A I didn't, and I--well, now, wait a minute.

16 I may have called Pierre or called the  
17 AFIP before or in the early part of the autopsy.  
18 That's the only time I might have used it. I'm not  
19 sure about that. And Jim, I don't think he used it  
20 either.

21 Q Do you remember Dr. Finck using the  
22 telephone?

1           A    I don't believe so. It was pretty busy  
2 all evening.

3           Q    The telephone?

4           A    Yes.

5           Q    Who was using the telephone?

6           A    Security people mostly.

7           Q    And could you overhear their conversa-  
8 tions?

9           A    A lot of it, yes.

10          Q    And do you know with whom they were  
11 speaking?

12          A    No idea.

13          Q    Did they ever tell you anything at all  
14 during the course of the autopsy about what the  
15 doctors in Dallas had reported to the media?

16          A    No.

17          Q    In the ordinary course of an autopsy  
18 procedure, would a prosecutor want to know  
19 information in the possession of the treating  
20 physician of the deceased?

21          A    Well, you'd try and get that beforehand,  
22 but if you didn't have it and you ran into

1 something unusual or of a bit of a problem, then  
2 you might try and do that.

3 Q Do you have any impression as to whether  
4 the prosector should have been informed during the  
5 course of the autopsy or before, what the treating  
6 physicians in Dallas had learned during the time of  
7 the treatment of President Kennedy?

8 A Well, it would have been nice, and we  
9 discussed that, actually, because when we first  
10 started doing the autopsy, there were marks on the  
11 body that we had difficulty--they had started to do  
12 cutdowns, and they made little incisions around the  
13 nipples, and there was no tubes or anything there.  
14 And we didn't know whether they were actually  
15 trying to get into vessels or going to get into the  
16 chest, whether he had had a hemothorax or  
17 something. And then we had difficulty in  
18 interpreting the wound in his anterior neck. And  
19 at the point when we came to those, we discussed  
20 whether or not we might call the Dallas hospital.  
21 But we elected not to, and I don't know why at this  
22 time.

1           Q     When you referred to the wound in the  
2 anterior neck, what was your first impression as to  
3 what that wound was?

4           A     I'm not sure what our first impression--  
5 oh, we thought that they had done a tracheostomy,  
6 and whether or not that was a bullet wound, we  
7 weren't sure, initially. It was after we found an  
8 entrance wound and then the blood external to the  
9 pleura that we had a track, and that proved to be  
10 the exit wound; but it was so distorted by the  
11 incision, initially we just assumed it to be a  
12 tracheostomy.

13          Q     Did you reach the conclusion that there  
14 had been a transit wound through the neck during  
15 the course of the autopsy itself?

16          A     Oh, yes.

17          Q     Did you receive any kinds of written  
18 reports at all from Dallas about the nature of the  
19 wounds on President Kennedy's body prior to the  
20 completion of the autopsy?

21          A     No.

22          Q     Were you ever told that such written

1 reports had been prepared?

2 A No. And, in fact, we never saw any  
3 reports. We may have seen such a report during the  
4 Warren Commission's investigation, but we certainly  
5 didn't in the early days after the autopsy.

6 Q Dr. Burkley was present in the emergency  
7 room in Parkland Hospital during the time President  
8 Kennedy was treated. Did Dr. Burkley tell you  
9 anything about what he observed at Parkland  
10 Hospital?

11 A He didn't tell me anything, and I don't  
12 think that he told Jim.

13 Q Some of the other people present in the  
14 autopsy room also had been present with President  
15 Kennedy in Parkland Hospital during the treatment.  
16 Did any of them tell you what they had observed  
17 during the treatment of President Kennedy?

18 A No one did, and I'm trying to think who  
19 might have been. Just Secret Service men would  
20 have been the only ones there. They were the only  
21 ones that could have been in both places, because  
22 no members of the--oh, I'm sorry. His military

1 aides were in the morgue, and they were probably  
2 also present in Dallas. But they didn't say  
3 anything.

4 Q You've referred to Secret Service agents  
5 as well as the President's military aides being  
6 present in the autopsy room. Who else do you  
7 recall was present in the autopsy room?

8 A Aside from those helping?

9 Q Yes.

10 A There were some staff people, on-duty  
11 staff people.

12 Q Staff of Bethesda Hospital?

13 A Of the Naval Hospital. I remember--I  
14 can't tell you now who they were, but I remember  
15 the chief of surgery and the chief of medicine, and  
16 then there was duty staff who were in and out.  
17 There were probably 30 or so people in the morgue.  
18 It's like an amphitheater. There were two rows of  
19 benches up elevated above the morgue table, and it  
20 was a rather spacious morgue, so it was not  
21 inconvenient or anything. And people always did  
22 that when we did autopsies.

1           Q     Was Captain Stover present at any point  
2 during the autopsy?

3           A     I think he was in the morgue; very  
4 limited. I'm not--I don't think he stayed, but I  
5 think he was there just to see that everything was-  
6 -that people were helping as necessary and so  
7 forth.

8           Q     Was Admiral Galloway present at all during  
9 the autopsy, do you recall?                 \*-

10          A     I rather think he was, but I would not  
11 swear to that.

12          Q     Do you recall whether the Surgeon General  
13 of the Navy was present--Admiral Kenny?

14          A     I can't say. I really was tied up in the  
15 autopsy, and I was paying no attention. The only  
16 attention I got of people moving around was the--I  
17 think it was the Navy military aide. One of his  
18 military aides was really fidgety and moving back--  
19 walking up and down the hallway and so forth, and  
20 he's about the only one that I remember very well.

21          Q     Were any of the people present at the  
22 autopsy making suggestions or giving any kinds of

1 instructions during the autopsy?

2 A No.

3 Q Were there any members of the Joint Chiefs  
4 of Staff present during the autopsy?

5 A I don't think so.

6 Q Could you describe in a general way what  
7 the scene at the autopsy was like? By that, I mean  
8 was it noisy? Was it hushed silence? Were people  
9 talking? How would you describe it?

10 A Well, for all the people in there, it was  
11 very quiet, really. We were all--Jim and Peter and  
12 I were talking. We did most of the talking. I  
13 could hear occasional telephone conversations or  
14 occasional conversations around the room, but for  
15 the most part, it was very quiet and subdued.

16 There was an awful lot of activity because  
17 we had the radiologist and his assistant, we had  
18 the photographers, and they were--the photographers  
19 were quite busy, because every time we turned  
20 around we had him take a picture.

21 Q I'd like to show you a document that's  
22 been marked as Exhibit 22, which appears to be from

1 the May 27, 1992, issue of the Journal of the  
2 American Medical Association. Have you had an  
3 opportunity to see the document previously that I  
4 am now showing you that's been marked as Exhibit  
5 22?

6 A Yes.

7 Q Could you turn to page 2798 of that  
8 article? I'd like to draw your attention to the  
9 center column, the first complete sentence of that  
10 column. I'll read for the record what it says. It  
11 appears that these are the words of Dr. Humes, and  
12 it says, "Still," he says, "the scene in the  
13 autopsy room was somewhat like trying to do  
14 delicate neurosurgery in a three-ring circus."

15 Do you recall Dr. Humes saying something  
16 like that to the Journal of the American Medical  
17 Association?

18 A Vaguely.

19 Q First, does that sort of description seem  
20 to you to be accurate, to the best of your own  
21 recollection, about the events at the autopsy?

22 A Well, I didn't think it was as confusing

1 as Jim apparently did. It may have been because my  
2 attention was on the work, but the whole evening  
3 was like a three-ring circus. But I didn't think  
4 the crowd was a problem.

5 Q In what respect would you say that the  
6 whole evening was like a three-ring circus?

7 A Well, so many very interesting things  
8 happened. We had a pretty good size crowd in the  
9 morgue. We were waiting for the body, and Jim--  
10 somebody asked Jim to step outside, and he did.  
11 And they were unloading the body from an ambulance,  
12 a Navy ambulance, and I think Jim--he's rather  
13 boisterous, you know, and he said, "Who's in charge  
14 here?" And some Army general said, "I am." And  
15 Jim directed them to bring the body into the morgue  
16 then.

17 Well, a lot of people heard that, "I am,"  
18 and that was in the papers almost immediately. And  
19 in the trial in New Orleans, that was in the paper.  
20 But that just--little things like that kept  
21 happening. The body was brought in, and we opened  
22 the casket on a gurney and removed the body to the

1 autopsy table, and Jim had the sheets laundered.

2           Then we had to take external photographs,  
3 and we had to take X-rays, and that was--we  
4 couldn't do anything at that point except make  
5 decisions and wait for the X-rays to come back and  
6 see where the bullets were, which we were primarily  
7 interested in at that point. But at that point, we  
8 then got pretty involved in the dissection, and  
9 everything sort of dissolved around me and I think  
10 Jim at that point, because we were devoting all of  
11 our attention to the remains. But I guess  
12 subsequently so many things have happened about the  
13 general's comments and so forth that it just seems  
14 like it was chaotic at that point. And I think it  
15 may have built up over 33 years to Jim also that it  
16 was like a three-ring circus. I don't think it  
17 really was.

18           There was a lot of activity and a lot of  
19 people, but everything was running very smooth.

20       Q     Did you see yourself the casket with  
21 President Kennedy in it being opened?

22       A     Yes.

1           Q     Did you help open the casket yourself?

2           A     I doubt it. I mean, I would not normally,  
3 because we had people that did things like that. I  
4 don't think I actually helped or was too near it.

5           Q     When the casket was opened, did you help  
6 at all in lifting the body out of the casket?

7           A     I don't think so.

8           Q     Do you recall who did?

9           A     I think a couple of our morgue attendants  
10 did that, probably.

11          Q     Were you personally with the body of  
12 President Kennedy from the time he was unloaded  
13 from the casket until the body left Bethesda later  
14 that morning?

15          A     Yes.

16          Q     When the body was first unwrapped,  
17 particularly the head, was the brain still present  
18 in the cranium?

19          A     Most of it.

20          Q     When you say most of it, approximately how  
21 much was there--

22          A     Well, probably half of one hemisphere was

1 absent. The bullet came in here, went through and  
2 exploded, and bone was eviscerated, and the upper  
3 surface of that side of the brain was missing.

4 Q During your answer you were pointing to  
5 parts of your head, which, of course, wouldn't be  
6 reflected on the record. Could you just describe  
7 in a general way--and we'll be more specific with  
8 this later, but when you say that it entered here,  
9 you were pointing to--

10 A The back right side of his skull.

11 Q Near the hairline, would that be fair, or-

12 A No. It's up above that. Well, whose  
13 hairline?

14 Q President Kennedy's.

15 A He had hair cut about like mine, and it  
16 was right up here: above his ear and toward the  
17 midline. And then the top of his head was blown  
18 off. A 14-centimeter segment of it was blown off.  
19 And it was on the right side of his brain that the  
20 brain was missing.

21 Q While the body was being unwrapped, did  
22 you see any bullet fragments or pieces of skull

1 fall out with the wrapping?

2 A No.

3 Q Dr. Boswell, I'd like to show you a  
4 document that appears as Exhibit 26. I'm drawing  
5 your attention to page 3. Could you look at the  
6 paragraph on page 3 of Exhibit 26 that begins with  
7 "The radiologist began his work very early on"?

8 A Just that paragraph?

9 Q Yes, just that one paragraph. You can  
10 read as much of the document as you want, but I  
11 just have a question for you on that paragraph.

12 The document quotes you as saying, quote,  
13 that you "thought it was a wound," referring to the  
14 tracheostomy. The statement that's here in this  
15 paragraph isn't entirely clear. My question to you  
16 would be: Do you recall at any point thinking  
17 before the time that you learned that the wound on  
18 the anterior neck was the tracheostomy incision  
19 that it may have been a wound of some sort?

20 A I think it was pretty obvious from the  
21 beginning that it was a tracheostomy wound. Then  
22 as the evening progressed, the question became

1 whether it was both an exit wound and a  
2 tracheostomy wound, because right in the middle  
3 there was what appeared to be the exit wound  
4 through which they had cut. I don't understand  
5 this.

6 Q When you say "this," you're pointing to  
7 the paragraph in document 26?

8 A Yeah, in the deposition here. "Dr.  
9 Boswell indicated that regarding the tracheostomy  
10 the doctors thought it was a wound." Well, I don't  
11 know what I might have said to make them say that,  
12 because a tracheostomy wound is a wound, and our  
13 conclusions had been that night and then reinforced  
14 the next day that it was a tracheostomy through a  
15 bullet wound.

16 Q At the time that you first saw the body of  
17 President Kennedy, did you see any other wounds or  
18 incisions on the body that you thought or came to  
19 believe were surgical wounds?

20 A Well, on his chest there were--there was  
21 an attempt or the beginning of a surgery wound. I  
22 don't know to this day what--I think we did learn

1 that they had been preparing to intubate him, and  
2 at some point they--I don't know whether it's  
3 marked on there or not. Oh, yeah, here we are.

4 Q When you're referring to the wounds on the  
5 chest, I'm now showing to you Exhibit No. 1. Are  
6 the wounds that you're referring to those that are  
7 marked on the diagram with the body facing forward  
8 on the chest?

9 A Yes.

10 Q In addition to those wounds and any other  
11 cutdowns that you might see on the document and the  
12 tracheostomy wound, was there any other surgical  
13 incision that you saw at the time that you first  
14 saw the body of President Kennedy?

15 A No.

16 Q More specifically, did you see any  
17 incisions that appeared to be any form of surgery  
18 in the head area prior to the time that you  
19 conducted any procedures at Bethesda?

20 A No.

21 Q Dr. Boswell, I'd like to show you a  
22 document that's been marked as Exhibit 7 and ask

1 you whether you have ever seen that document  
2 previously. I'll state for the record that it is  
3 designated Autopsy Manual by the Departments of the  
4 Army, the Navy, and the Air Force, dated July 1960.

5 A I'm sure I have, but it's been a long  
6 time.

7 Q Dr. Boswell, could you turn to page 72 of  
8 the Autopsy Manual? Could you look at the portion  
9 that is marked Appendix 3--this is on page 72--and  
10 tell me what you understand that page to be, if you  
11 do have an understanding of it?

12 A Where? I'm sorry.

13 What was your question?

14 Q Could you tell me what you understand  
15 Appendix 3 to be in Exhibit No. 7?

16 A Well, it's the weight of most of the  
17 organs and average--lists the average weight,  
18 variation, measurements.

19 Q I'd like you to look at the average  
20 weights of bodies as listed in Exhibit No. 7 as  
21 compared with the face sheet of President Kennedy  
22 and ask you whether you notice any particular

1 differences. And maybe we can start out with the  
2 right lung.

3 A The right lung goes from 360 to 570,  
4 average 450. The right lung of President Kennedy  
5 was slightly under that weight. The left lung is  
6 325 to 480, average 375. His was 290. And it's  
7 considerably less than that.

8 Q Okay. For the spleen?

9 A The spleen, President Kennedy's weight, 90  
10 grams. In a 20- to 65-year-old person, average is  
11 155.

12 Q So President Kennedy's was--

13 A Small.

14 Q Small?

15 A Mm-hmm. Kidney, his is slightly under,  
16 his right kidney is slightly under average. The  
17 left kidney is just about average.

18 Q How do you--

19 A I'm sorry. Average is a hundred--I'm  
20 sorry, 313. So his was considerably under average.

21 Liver--I don't know how that got down to  
22 650. Average is 1,650, and his was 650. Heart,

1 350; his is just about average, the heart.

2 Q So several of the organs would be under or  
3 substantially under what the average weight would  
4 be?

5 A That's right.

6 Q Did you notice that at the time of the  
7 autopsy? Did anyone remark upon that?

8 A I don't know. As I say, I don't know  
9 whether I ever appreciated that or not, because I  
10 did not write those and I didn't measure them--  
11 well, I probably did measure some of these because  
12 I think I took the lungs out and maybe the heart.

13 Q I note that there's no weight there for  
14 the brain. Do you remember whether the fresh brain  
15 was weighed?

16 A I doubt that it was weighed.

17 Q Why not--

18 A Well, I shouldn't say that. It was  
19 formalin-fixed. We floated them in formalin and a  
20 piece of cloth, and it was taken out, and it  
21 probably was weighed. Why the weight is not down  
22 here, I don't know.

1           Q    Wouldn't that be a fairly important thing  
2 to weigh if there were a gunshot wound to the head?

3           A    Especially with some of it missing, that's  
4 true. I don't know why the weight's not down here.  
5 I remember taking it out. We had a neuropatholo-  
6 gist from the AFIP that came over, and we took it  
7 out of the formalin after it was fixed a couple of  
8 days--in fact, on Monday. And I suspect that that  
9 weight would be on a separate piece of paper,  
10 because I know it was weighed at that time. But we  
11 elected not to cut the brain because the trauma was  
12 evidenced on the surface without having to cut it,  
13 and we thought that it may be important to  
14 preserve. And then we never saw it again. And we  
15 put it back in the formalin, and it was delivered  
16 to Admiral Burkley in a bucket, in the formalin,  
17 and then we never saw it again.

18           Q    When was it delivered to Admiral Burkley?

19           A    I believe it was on Monday, but I'm not  
20 sure, because we wrote up an addendum to the  
21 autopsy, I think on Monday, after we had examined  
22 the brain. And I had read the slides on Sunday, so

1 that part of the report--there was an addendum,  
2 though, that Jim took with the brain, and I think  
3 he took the paraffin blocks and the tissue slides  
4 with the brain and the addendum down to Admiral  
5 Burkley on Monday. But that I'm not absolutely  
6 sure. I'll rely on Jim's memory for that.

7 Q There are a few questions I wanted to ask  
8 you about some of your last statements. First, you  
9 made the statement, as I have it down, that you  
10 know that it was weighed at that time. It wasn't  
11 clear to me at what time you were saying that it  
12 was weighed. At the time of the autopsy or--

13 A No.

14 Q --the supplemental examination?

15 A The supplementary examination. I'm sure  
16 it must have been weighed at the autopsy. I know  
17 of no reason why it wouldn't--the scale is right  
18 there at the head of the table, and every organ, as  
19 it's removed, is weighed. I'm sure it was weighed.  
20 Do we not have the weight of the brain in the final  
21 autopsy report?

22 Q There is no weight--in the supplementary

1 report, when it was weighed at that time, there is  
2 a weight. But I am aware of no weight prior to the  
3 supplementary report.

4 A Okay.

5 Q Are you aware of any time it was recorded  
6 prior to that?

7 A No, not--unless it was put on a separate  
8 sheet of paper. Obviously it isn't on this one.

9 Q When you say "this one," you're referring  
10 to Exhibit 1--

11 A Now, as far as the difference in the  
12 weights from average and these, I don't know why  
13 these are so far--these are really far off, the  
14 liver, for instance. The rest of these I wouldn't  
15 be too concerned about. They could be very  
16 accurate or they could be inaccurate.

17 Q Do you see any of the organs of the neck  
18 being weighed on Exhibit 1 on the first page?

19 A No, and the only organ in the neck would  
20 be the thyroid.

21 Q Do you know whether the thyroid was  
22 removed from President Kennedy?

1       A     I don't remember that it was. It need not  
2 have been necessarily removed. I mean, it could  
3 have been examined in situ and not removed. But I  
4 do not remember.

5       Q     With there being a bullet wound transiting  
6 the neck, would it not be standard autopsy  
7 procedure to remove all of the organs of the neck?

8       A     Normally it would. The trachea, larynx,  
9 and everything.

10      Q     Do you know whether the trachea, larynx,  
11 and thyroid were removed?

12      A     I'm almost sure that we did not remove the  
13 trachea and larynx. I believe the lungs were  
14 removed separately. Normally you would take all  
15 the neck organs out with the thoracic organs.

16      Q     Did anyone request that the organs of the  
17 neck not be removed?

18      A     No.

19      Q     You had said in response to an earlier  
20 question, if I understood you correctly, that it  
21 was important to preserve the brain in its state  
22 without sectioning. Did I understand that

1 correctly?

2       A Well, we decided that that's what we would  
3 do. We would--that it wasn't necessary in order to  
4 describe and determine the injuries to the brain to  
5 do a regular sectioning of it at that time, and we  
6 thought it might be more important to save for  
7 later investigation.

8       Q You stated previously that it was your  
9 understanding that the brain had been delivered to  
10 Admiral Burkley on Monday. The assassination was  
11 on Friday, the 22nd, and that would make Monday the  
12 25th. Is that correct?

13      A Yes. It probably was not delivered that  
14 early because ordinarily we kept a brain and fixed  
15 it for five days. Now, regular brain cutting was  
16 on Wednesday, and--but on the other hand, Jim was  
17 anxious to get all the material down to the  
18 Admiral, and I'm not sure about those times.

19      Q What was it that made you think that it  
20 was on Monday? Or how--

21      A Because we were expediting things so  
22 rapidly and getting everything down there, and I

1 just had thought that Jim took the supplementary  
2 report, the slides--I know I had the slides on  
3 Sunday, and the paraffin blocks, and all that was  
4 to go to the White House. And I just thought that  
5 probably we got it ready and got it down there on  
6 Monday. But you're right about the fixation of the  
7 brain. It may have been a couple of days later.  
8 But it was within that first week after the  
9 autopsy.

10 Q Let me go back to Exhibit No. 1. I'd like  
11 to show you the bottom left-hand corner of that  
12 where it appears to state in handwriting,  
13 "Verified, G. G. Burkley." Have you ever seen that  
14 or noticed that before?

15 A No.

16 Q Do you have any idea what that is?

17 A No.

18 Q I'd like to point out to you the two lines  
19 on the diagrams, both on the left diagram and the  
20 right diagram, the two lines that seem, at least  
21 from a lay perspective, to be demarking the neck.  
22 That's not a very precise term, obviously. Could

1 you tell me what those two lines are that you see?  
2 Do you know what those signify?

3 A I'm sorry. I can't. I cannot tell you  
4 why those are...

5 Q I'd like you to note on the right diagram;  
6 on the head there appears to be a circle with an  
7 arrow pointing up and to the left. Do you see  
8 that?

9 A Yes.

10 Q Are you the person who made that mark?

11 A Yes.

12 Q Could you tell me what that mark  
13 signifies?

14 A Well, at this late date, I have to assume.  
15 I remember that there is a--in the scalp there was  
16 a tunneling of the wound through the skin and  
17 subcutaneous tissue, and I think that is the  
18 direction that the tunnel went.

19 Q Does that mean that there was a tunnel  
20 between the entrance point and the point where the  
21 bullet entered into the skull?

22 A Yes.

1           Q     About what was the distance of the tunnel  
2 from the entrance point in the scalp to where the  
3 bullet entered the skull?

4           A     I would assume that that's 15 by 6  
5 millimeters, 6 millimeters across, and that the  
6 tunnel itself was a centimeter-and-a-half.

7           Q     So the tunnel would be definitely shorter  
8 than an inch, less than an inch?

9           A     Less than an inch. About three-quarters.

10          Q     Could you turn to the second page of  
11 Exhibit 1? I'd like to ask you some questions  
12 about the diagram. First, just to make sure the  
13 record is clear on this point, you were the person  
14 who drew the diagram and made the markings on the  
15 second page?

16          A     Yes, right.

17          Q     I note in the center of the--well, maybe  
18 if you can just describe in your own terms what the  
19 drawing signifies, just in a general way.

20          A     Well, right in the center is--or just  
21 above the anterior portion here is the word  
22 "missing," and all the bone for a distance of 17

1 centimeters in this direction was missing.

2 Q I'm sorry. If I can back you up for just  
3 a moment, if you could just describe in a general  
4 way what the diagram signifies before any of the  
5 measurements are described.

6 A Can I go back just a little bit and--

7 Q Sure.

8 A There was a big wound sort of transverse  
9 up like this from left posterior to right anterior.  
10 The scalp was separated, but it was folded over,  
11 and you could fold the scalp over and almost hide  
12 the wound. When you lifted the scalp up, you could  
13 really lay it back posteriorally, and there was a  
14 lot of bone still attached to the scalp but  
15 detached from the remainder of the skull. And I  
16 think these parts back here probably reflect that.

17 Q Dr. Boswell, I'm sorry to jump in here,  
18 but I just want to make sure that the record is  
19 going to be clear here. And we can come back to  
20 this, and I want you to explain it the best you  
21 can. But would it be fair to say first that the  
22 diagram that we're talking about is a drawing of

1 the skull of President Kennedy as seen from the  
2 top? Would that be fair?

3 A Yes.

4 MR. GUNN: I'd like to ask the reporter if  
5 he could read back Dr. Boswell's last answer with  
6 regard to the transiting and the direction. When  
7 you hear this, I would like you to think if this is  
8 what you meant to say. I may have heard it  
9 differently from what you said, and I just want to  
10 make sure we're all on the same page.

11 [The pertinent portion of the record, as  
12 recorded, was read by the reporter.]

13 BY MR. GUNN:

14 Q Dr. Boswell, you've just had an  
15 opportunity to hear your prior answer read back.  
16 Was it correct that there was a wound that went  
17 from the left posterior to the right anterior? Is  
18 that correct?

19 A Yes.

20 Q When you say the left posterior, what do  
21 you mean?

22 A The left occipital area, and that wound

1 extends to the right frontal area. And what I  
2 meant was that the wound in the scalp could be  
3 closed from side to side so that it didn't appear  
4 that there was any scalp actually--scalp missing.

5 Q Okay. If you could--when you say the  
6 entrance wound, if you could give approximately the  
7 point of where that entrance wound is with  
8 reference to the diagram in Exhibit 2, and maybe  
9 just take as some sort of a reference point the 4  
10 that is down at the bottom of that diagram. Was  
11 the entrance wound to the left or to the right of  
12 below where that 4 is? Do you see what I'm  
13 referring to?

14 A Yes. It would have to be a little bit to  
15 the right of where the 4 is and farther back than  
16 the 4.

17 Q In the autopsy protocol--

18 MR. GUNN: Let's go off the record.

19 [Discussion off the record.]

T2A 20 BY MR. GUNN:

21 Q Dr. Boswell, could you look at the top of  
22 page 4 of Exhibit 3 that I have just handed to you

1 where it says, "Situated in the posterior scalp  
2 approximately 2.5 centimeters laterally to the  
3 right and slightly above the external occipital  
4 protuberance is a lacerated wound measuring 15 by 6  
5 millimeters." Is that an accurate description of  
6 where you understood the entrance wound to be at  
7 the time of the autopsy, 2.5 centimeters to the  
8 right and slightly above the external occipital  
9 protuberance?

10 A Yes.

11 Q Let me ask you a question about Exhibit 3  
12 as a whole. Have you seen the document previously  
13 that is now marked Exhibit 3?

14 A A long time ago.

15 Q What do you understand, just in a very  
16 general way, it to be?

17 A The autopsy report. I guess this was the  
18 initial report.

19 Q Is that your signature that appears on  
20 page 6 of Exhibit No. 3?

21 A Yes.

22 Q Did you at any point ever change your mind

1 about the location of the entrance wound in the  
2 skull?

3 A No.

4 Q Do you know whether Dr. Humes ever changed  
5 his position with respect to the location of the  
6 entry wound in the skull?

7 A I've had a lot of people tell me that he  
8 did, before the House Committee that he agreed to  
9 lower this wound.

10 Q You're referring to the skull wound in the  
11 back of the head?

12 A Yeah. But since I've talked with him  
13 since then, he denies that, and I think he now  
14 relies on this written report right here.

15 Q You're referring now to Exhibit 1?

16 A Yes.

17 Q On the top of page 4, the portion that I  
18 showed you just a minute ago, it refers to a  
19 lacerated wound measuring 15 by 6 millimeters.  
20 What is the portion that is lacerated that is being  
21 referred to there? Do you know?

22 A I'm sure that is the tunnel-like wound of

1 entrance on the scalp.

2 Q Now, going back to the diagram on page 2  
3 of Exhibit 1, in the center of the diagram there  
4 are markings that appear to me to say right in the  
5 center 10 with arrows on either side, and 17 with  
6 arrows pointing up and down. Is that correct?

7 A Yes.

8 Q And below that 17 and the arrow, it says  
9 "missing." Am I reading that correctly?

10 A Yes.

11 Q Can you tell, was something that was 10 by  
12 17 missing?

13 A No. The space measured 10 by 17, and  
14 there was missing bone there. But the missing  
15 parts were all fragmented, and there were irregular  
16 margins all around the space.

17 Q I guess the question would be: Were skull  
18 fragments missing from this 10-by-17 area space, or  
19 does this just mean that there were fractures in  
20 the skull from the 10-by-17 space?

21 A Most of that space, the bone was missing.  
22 There were a lot of small fragments attached to the

1 scalp as it was reflected, but most of that space,  
2 the bone was missing, some of which--I think two of  
3 which we subsequently retrieved.

4 Q When you said that you subsequently  
5 retrieved, you were pointing at the figure at the  
6 bottom of the page?

7 A Yes. That was one of them.

8 Q So this is the portion at the bottom of  
9 the page that looks roughly half-circular with a  
10 notch on one of the sides of it?

11 A Yes.

12 Q Would that be correct?

13 A Right.

14 Q Where it says 10 by 17 missing, would that  
15 be referring to 10 centimeters by 17 centimeters?

16 A Right.

17 Q Right above the 10, there's a space where  
18 there's a marking that appears to say 19  
19 centimeters or 19 cm. Is that correct?

20 A Yes.

21 Q What does that refer to?

22 A That's the--when the scalp is reflected,

1 the space measured 19 centimeters at that level up  
2 there, just back behind the frontal bone.

3 Q Was there any laceration in the scalp that  
4 extended approximately 19 centimeters?

5 A No. The scalp had to be reflected for  
6 part of that area, but there was an incised wound  
7 up there that extended into the right eye socket  
8 and then back across his temporal and frontal bone.

9 Q So the 19 centimeters does not refer then  
10 to the length of the laceration--

11 A No.

12 Q --in the scalp?

13 A That was just the area of the space up  
14 there at that level.

15 Q Now, was that--I'm sorry I'm not  
16 understanding, but was that some kind of a fissure  
17 or a break in the bone that was 19 centimeters?

18 A The bone was all fragmented for that  
19 distance, 19 centimeters across the frontal bone.

20 Q Going up further on the diagram, there  
21 appears to be a "3 cm" right over what appears to  
22 me to be the left eye. Is that correct? First,

1 does that say "3 cm"?

2 A Yes. And that's not my writing. Either  
3 Jim or--and that doesn't look like his writing, so  
4 that may be Pierre. That apparently is the vomer  
5 bone, which is crushed and drawn up there. I don't  
6 believe that this is in the frontal bone.

7 Q When you say "this," you're pointing to  
8 the rectangular shape?

9 A To the little oblong 3-centimeter specimen  
10 there.

11 Q Do you know what the 3 centimeters is  
12 referring to there?

13 A I'm sure it must be--now, that is mine,  
14 that 3 centimeters is my writing, and that must be  
15 the length of the piece of bone there.

16 Q Does that signify a cracked bone or--

17 A Crushed, yeah.

18 Q Crushed?

19 A Mm-hmm.

20 Q Could you explain why, at least to me as a  
21 lay person, it appears that there is a rectangular  
22 drawing near what I would presume to be the area of

1 the right--or the left orbit and it seems to be  
2 circular in the right orbit? Is there some  
3 explanation for that that you know of?

4 A Well, I remember that the fracture through  
5 the bone extended from the frontal bone and through  
6 the floor of the orbit. Why that is round and this  
7 one is square over here, I don't know.

8 Q In the center of the circle on the right  
9 orbit, it appears that there is a hook-shaped line  
10 that crosses through the center of the circle and  
11 then goes on to the front of that. Do you see that  
12 circle?

13 A Yes.

14 Q Does that signify a crack in the floor of  
15 the orbit? Is that the purpose of that line?

16 A Yes.

17 Q Do you see the writing that is over on the  
18 right side?

19 A Yes.

20 Q Can you read that?

21 A "Falx loose from sagittal suture"--  
22 "sagittal sinus from the coronal suture back."

1 Q What does that mean?

2 A Okay. The covering of the brain attaches  
3 in the center of the skull from front to back or  
4 back to front, but all along the top. And that's  
5 where the dura comes together on both sides and  
6 comes down around the brain. And that was loose  
7 all the way from front to back.

8 The two lobes of the brain are encased in  
9 a fibrous connective tissue membrane, and there's  
10 an external and internal one, and they come  
11 together and are attached all along the surface in  
12 the center, midline.

13 Q And so down that sinus that goes down from  
14 the frontal bone to the back, all of that was  
15 loose?

16 A Yes.

17 Q What was it in your understanding that  
18 caused that to become loose?

19 A Well, there was actually an explosion in  
20 his cranial cavity, and half of the right lobe of  
21 his brain disappeared through that cavity and  
22 loosened the surface of the membrane there.

1           Q     If we were to draw a line down the center  
2 of the skull right down the midline, how much of  
3 the skull to the left of that midline was missing,  
4 approximately? Or how could you describe how much  
5 was missing?

6           A     Well, unless--I'm sorry. Your question  
7 was on the right side?

8           Q     On the left side.

9           A     The left side. Less than half of the  
10 space was denuded bone, because I think this was a  
11 loose piece over here that was still attached to  
12 the scalp.

13          Q     You're referring to the--

14          A     The one that's marked 10.

15          Q     Over on the left side of the drawing.

16          A     Right. So I would say that 60 or 70  
17 percent of the space is on the right side, 30 to 40  
18 percent is on the left side, where that bone has  
19 been removed.

20          Q     One of my questions was going to be what  
21 the significance of that marking is on the left  
22 side with the 10 in the center, and from what I'm

1 understanding you to be saying, that was a piece of  
2 the skull that was loose. Is that correct?

3 A Fragmented from the rest of the skull but  
4 still attached to the scalp on its under surface.

5 Q Was that measurement made before or after  
6 the brain was removed?

7 A Probably before.

8 Q How did you make that measurement?

9 A I suspect that--well, I don't know. We  
10 had reflected the scalp, and whether or not this  
11 was measured attached to the scalp as it was  
12 reflected down or whether I measured it up here, I  
13 can't tell you that.

14 Q When you say reflected the scalp, you mean  
15 that you pulled the scalp completely off the skull  
16 so you could examine the skull from the outside?

17 Would that be fair?

18 A Well, we actually folded it back below,  
19 because there--you don't have the photographs here,  
20 do you?

21 Q We'll be looking at them later.

22 A I think there's a photograph with this

1 reflected down that I can demonstrate.

2 Q Okay. Down at the bottom of the drawing,  
3 there are the numbers 4, 3, and 6. Do you see  
4 those?

5 A Yes.

6 Q What do those signify?

7 A Well, I think probably centimeters, since  
8 that 10, that looks like about a 10-centimeter  
9 piece of bone relative to the rest of these. And I  
10 think this is 4 centimeters by 3 by 6 centimeters.

11 Q Why were the dimensions taken of that  
12 piece?

13 A I don't think that those were parts of the  
14 fragments that came back. I'm sorry. I hesitate  
15 to speculate on that. I don't know.

16 Q Just one last point that I would like to  
17 just clarify in my one mind is: On the piece for  
18 the markings for the 10 by 17 centimeters that were  
19 missing, would it be fair to say that when you  
20 first examined the body prior to any arrival of  
21 fragments from Dallas, the skull was missing from  
22 approximately those dimensions of 10 by 17?

1 A Yes.

2 Q I'd like to ask you a question now about  
3 the thoracic wound that is on the right diagram,  
4 still in Exhibit 1. Do you see that?

5 A It's not thoracic, though.

6 Q How would you describe it?

7 A It's neck.

8 Q Okay.

9 A Despite the position on the chart.

10 Q I'd like you to turn to page 3 of Exhibit  
11 No. 3, which was the autopsy protocol. I'd like  
12 you to look at the second paragraph down where it  
13 says, "Situated on the upper right posterior thorax  
14 just above the upper border of the scapula there is  
15 a 7-by-4-millimeter oval wound." Do you see that?

16 A Yes.

17 Q Could you explain to me what it means that  
18 the wound was situated on the upper right posterior  
19 thorax?

20 A Well, that's what the diagram is meant to  
21 depict. Posterior thorax--upper right posterior  
22 thorax would be there in that general area. But

1 then the numbers indicate its position much better,  
2 and Jim wrote "just above the upper border of the  
3 scapula." Well, the scapula is this whole shoulder  
4 girdle here, and so it has to be up above here.  
5 And then it says "14 centimeters below the tip of  
6 the right mastoid process." Well, the mastoid  
7 process is not delineated on here, but it's just at  
8 the ear. So 14 centimeters really would be down  
9 here at the base of the neck.

10 Q I'd like to show you, continuing with this  
11 thing, Exhibit No. 6, which appears to be death  
12 certificate for President Kennedy signed by Admiral  
13 Burkley. The first question is: Have you ever  
14 seen this document before?

15 A No.

16 Q I'd like you to note on the second page  
17 where it says that--just read the first sentence to  
18 yourself, and I'll read it for the record. It says  
19 that "President Kennedy was struck in the head by  
20 an assassin's bullet, and a second wound occurred  
21 in the posterior back at about the level of the  
22 third thoracic vertebra." Do you see that?

1           A     Yes.

2           Q     Is that correct?

3           A     No.

4           Q     What vertebra was the wound closest to, if  
5 you know? Again, we're talking about the wound  
6 other than the skull.

7           A     It would not be a thoracic vertebra. It  
8 would have to be a cervical vertebra.

9           Q     Dr. Boswell, I'd like to show you Exhibit  
10 No. 22, page 2800, and draw your attention to one  
11 portion of that article that relates to what we're  
12 talking about now. If you look over in the third  
13 column on the right, the first full paragraph, if  
14 you could read that to yourself, please.

15                 As I examine the photographs, the  
16 President's clothing, and other records, it appears  
17 to me as a lay person that the marking that you  
18 have made on the diagram on the right seems roughly  
19 to correspond to the other records; but it also  
20 seems as if you're suggesting that the diagram is  
21 incorrect.

22           A     Right.

1 Q Is that right?

2 A Yes. When we saw the clothing, we  
3 realized that where I had drawn this was--if you  
4 looked at the back of the coat, it was in the exact  
5 same place. But the coat had been--was up like  
6 this. He was waving, and this was all scrunched up  
7 like this. And the bullet went through the coat  
8 way below where this would be on his body, because  
9 it was really at the base of his neck.\* And the way  
10 I know this best is my memory of the fact that--  
11 see, we probed this hole which was in his neck with  
12 all sorts of probes and everything, and it was such  
13 a small hole, basically, and the muscles were so  
14 big and strong and had closed the hole and you  
15 couldn't get a finger or a probe through it.

16 But when we opened the chest and we got  
17 at--the lung extends up under the clavicle and high  
18 just beneath the neck here, and the bullet had not  
19 pierced through into the lung cavity but had caused  
20 hemorrhage just outside the pleura. And so if I  
21 can move this up to here--it's shown better on the  
22 front, actually. The wound came through and

1 downward just above the thoracic cavity and out at  
2 about the thyroid cartilage. So if you put a probe  
3 in this and got it back through like this, that  
4 would come out right at the base of the neck.

5 Q When you say "a problem through this,"  
6 you're referring to the entrance wound--

7 A I'm sorry.

8 Q --in the posterior part coming out the  
9 front? \*

10 A The exit wound in the front.

11 Q I'd like to show you a diagram that's  
12 marked Exhibit MI 13 and ask you if you've seen  
13 that diagram before.

14 A I don't remember it, but I--

15 Q I'll state for the record this is Warren  
16 Commission Exhibit 386 that was prepared by H.I.  
17 Rydberg to show the entrance wound in the back.  
18 Does that help refresh your recollection on the  
19 diagram?

20 A Yes.

21 Q If I understand you correctly, you have  
22 been suggesting that although the wound as depicted

1 on the diagram in Exhibit 1 may look more as if  
2 it's thoracic, you are arguing now or your  
3 statement of clarification now would be that it's  
4 more in the neck wound. Does the drawing in  
5 Exhibit No. MI 13 better demonstrate to your mind  
6 where the actual entrance wound was?

7 A Exactly. Yes.

8 Q Is it your sense that Exhibit MI 13 is  
9 reasonably accurate for showing the location of the  
10 wound entrance to the neck?

11 A Yes.

12 Q Dr. Boswell, I'd like to show you a  
13 document that's been marked Exhibit 44, which, for  
14 the record, is a report prepared by FBI Special  
15 Agents O'Neill and Sibert, dated November 27, 1963.  
16 Agents O'Neill and Sibert were at Bethesda on the  
17 night of the autopsy.

18 Dr. Boswell, I'd like to show you page 5,  
19 the paragraph beginning "On the basis of the latter  
20 two developments." Could you read that paragraph  
21 to yourself, please?

22 [Pause.]

1 BY MR. GUNN:

2 Q Dr. Boswell, have you had an opportunity  
3 to read that?

4 A Yes.

5 Q Do you know who Agents O'Neill and Sibert  
6 were?

7 A Yes.

8 Q Did you ever talk to them?

9 A No.

10 Q Do you see anything in the paragraph that  
11 you just read that you now understand to be  
12 incorrect?

13 A Yes.

14 Q What is it that you understand to be  
15 incorrect in that paragraph?

16 A Well, it's not totally incorrect. I'm  
17 sure he overheard us, while we were dissecting,  
18 making comments and discussion and so forth, and  
19 there was a time at which point we had seen the  
20 X-rays and were looking at the wounds and saw that  
21 there were no whole bullets left in the body. And  
22 one of the possibilities early in the investigation

1 was that that bullet had gone in there and worked  
2 its way out or was still there or something. By  
3 X-ray it wasn't there, so it had to have gone  
4 someplace. And we had the bullet wound of  
5 entrance. We didn't yet have the bullet wound of  
6 exit. We had the tracheostomy wound in the front,  
7 but no other place. And so we were just  
8 contemplating whether that had gone in and had not  
9 come out until they had done some manipulation on  
10 him and that it might be on his stretcher or  
11 something.

12 Well, they did find a bullet on the  
13 stretcher, but not that one.

14 Q So would it be fair to say that although  
15 Sibert and O'Neill's statement that the doctors  
16 believed that there may have been an entrance wound  
17 in the back and the bullet worked itself out during  
18 the course of treatment, that although that may  
19 have been speculation at one point during the  
20 autopsy, that was abandoned by the conclusion of  
21 the autopsy?

22 A True. That's true.

1           Q     So this would be almost as if the agents  
2     were present at one point, they left the room, and  
3     that that was their conclusion based upon something  
4     that had occurred partway through the autopsy?

5           A     Yes. They were reporting this stuff by  
6     telephone at the time we were talking.

7           Q     Do you know to whom they were reporting  
8     it?

9           A     I have no idea.

10          Q     Did you ever, in terms of probing the  
11     wound either in the skull or in the neck, did you  
12     ever calculate the angle at which the bullet had  
13     entered the body?

14          A     No. We couldn't.

15          Q     Let's go back, if we could, to the  
16     location of the entrance wound in the skull. Could  
17     you tell me whether the entrance wound that you  
18     identified in the skull was something that appeared  
19     like a puncture in a bone with the remainder of the  
20     bone surrounding the hole? Or did the hole break  
21     off such that you would need other pieces of bone  
22     to be brought into place to show the entire

1 periphery of the wound? I'm not sure that question  
2 made--

3 A Yes, I understand it, and I think--I think  
4 maybe photographs that we have explain it. I  
5 believe that there was an area of bone intact down  
6 here that we could attach this to.

7 Q Let me just state for the record you're  
8 referring now to the second page of Exhibit 1, and  
9 when you say "this," you're referring to the small  
10 fragment at the bottom of the page. Is that  
11 correct?

12 A Yes.

13 Q Okay.

14 A And the beveling is such on both the wound  
15 here--or the remaining bone that is someplace in  
16 this area, but not shown in this diagram, and in  
17 this piece which, when put there, shows the  
18 approximate dimensions of the wound, and the  
19 beveling on the bone shows entrance and exit.

20 Q So when you say "this wound which was  
21 placed there," just because that won't necessarily  
22 be clear on the record, when you say "this wound,"

1 you're referring to the diagram at the bottom of  
2 the page and suggesting that that would be placed  
3 into the larger diagram towards the bottom?

4 A Approximating a piece of bone which is not  
5 demonstrated or diagrammed here.

6 Q Okay. So do that mean that it was your  
7 understanding that the piece of bone that is drawn  
8 at the bottom of page 2 is showing part of the  
9 entrance wound in the back of the skull?

10 A Yes. Actually, that Rydberg drawing that  
11 you showed me earlier may--

12 Q Exhibit 13?

13 A Yes.

14 Q MI 13?

15 A Now, this is not--this is contrary to my  
16 arrow here, and I don't know why, because it shows  
17 the tunneling going to the right rather than to the  
18 left.

19 Q When you say "this," you're pointing at  
20 Exhibit MI 13 and to the ovular wound in the skull;  
21 is that correct?

22 A Yes.

1           Q     Okay. And you're saying that the wound  
2 that is depicted on MI 13 is proceeding in a  
3 different angle and direction from the one that you  
4 have marked on Exhibit 1--

5           A     Right.

6           Q     --in the diagram on the right. Is that  
7 correct?

8           A     Yes. And I don't know why that is  
9 depicted in that manner, unless they decided that--  
10 the artist decided that that went that way. But,  
11 anyway, this piece of bone right here--

12          Q     You're referring to the bottom of page 2  
13 on Exhibit 1?

14          A     Yes, should fit right here.

15          Q     Now, you're saying that it should fit  
16 right over the top of the ovalular wound that is on  
17 MI 13?

18          A     Right.

19          Q     So would it be fair to say, then, with the  
20 drawing on MI 13 that there is a piece of bone that  
21 has been replaced into the skull before the drawing  
22 is made? Would that be fair?

1           A     Well--

2           Q     The drawing as it's depicted in MI 13 is  
3 not how the skull appeared when the autopsy began?

4           A     Well, this is really the--really the  
5 scalp. This is as though the scalp were intact and  
6 everything. This is not meant to depict the bone  
7 and bone fragments, except for this defect here.

8           Q     So MI 13, with the exception of the black  
9 portion up at the top right, does not depict any of  
10 the skull wounds. Would that be fair?

11          A     Right, except the wound of entrance here.

12          Q     Except the single wound of entrance.

13                 We have been referring to page 2 of  
14 Exhibit 1 in the small diagram at the bottom. Is  
15 the bone that you have drawn there the sole  
16 fragment that separates the entrance wound in the  
17 back of the President's head from the large  
18 fragment that is missing at the top right of the  
19 head?

20          A     I seem to remember two pieces, two  
21 fragments, and I seem to remember a photograph or a  
22 drawing depicting two fragments. And I don't know-

1 -I think the other one is even larger than this,  
2 and I don't know where it came from.

3 Q When you say the other fragment is larger  
4 than this, the "this" is the small diagram on page  
5 2 of Exhibit 1?

6 A Right. I think that this came in like  
7 halfway through the autopsy, and then sometime  
8 during the night the other piece came in, and we  
9 still have--there it is, I believe. These are  
10 X-rays.

11 Q Dr. Boswell is now being shown Exhibit MI  
12 15, which are X-rays taken of fragments arriving  
13 from Dallas during the course of the autopsy.

14 A And I think this is an X-ray of this piece  
15 showing the wound of entrance there, part of it.

16 Q You're now making a connection between the  
17 medium-sized fragment on MI 15 and comparing that  
18 to the drawing at the bottom of page 2 on Exhibit  
19 1; is that correct?

20 A Yes.

21 Q Dr. Boswell, I'd like to show you Exhibit  
22 No. 74, which is a three-dimensional plastic model

1 of a human skull. Do you see that?

2 A Yes.

3 Q I would like you, if you would first for  
4 me, just to point to where on the skull, to the  
5 best of your recollection, was the entry wound in  
6 the skull.

7 A Someplace here. It had a measurement--  
8 okay.

9 Q You're referring to page 4 of Exhibit No.  
10 3, which is the autopsy protocol.

11 A I don't know where...I don't know where  
12 our measurements are for the skull wound, but it  
13 says 2.5 centimeters laterally to the right,  
14 slightly above the external occipital protuberance.

15 That's about as good as I can--

16 Q Okay. Could you make a mark? I  
17 understand that this is going to be somewhat  
18 approximate, but your best marking of where that  
19 occasion is for the entrance wound.

20 Okay. Now, I'd like to go back to Exhibit  
21 1 on the second page and have you mark the  
22 approximate dimensions of the 10-by-17 portion of

1 the skull that is missing. Let me ask maybe just  
2 one question first. The 10 by 17 was the  
3 measurement taken as if the full direction of the  
4 skull were in place, or would it be, that is, going  
5 in a curvular--or in a curve, or would it be a  
6 straight line through the wound?

7 A I think the 10 by 17 was a straight line,  
8 and then the 19 was a curved line at the--

9 Q Does it make sense to remove the top  
10 portion of Exhibit 74 to take the measurement, to  
11 give an approximate--

12 A I think that will be all right. Work on  
13 this a while. See, most of this was gone, and so  
14 the distance is going to be actually across here,  
15 and that's almost all the skull. This is almost an  
16 impossible task.

17 It's an adult skull?

T2B 18 Q Yes. While you're doing that, let me try  
19 a question. Would the measurement for the 17  
20 centimeters begin at the entrance wound and go  
21 forward?

22 A I think it goes--it's right here, yes.

1 And that's why this is almost impossible to do.

2 Q I understand it's a difficult--I mean, and  
3 we'll just treat this as being, to some extent,  
4 approximate. But just the best that you can do.

5 Let me try one question while you're doing  
6 that. When you made the measurement on the night  
7 of the autopsy, what kind of measuring device did  
8 you use? Would it have been a straightedge?

9 A Straightedge.

10 Q So not a tape or a cloth tape?

11 A No, no. Straightedge.

12 I'm having an awful hard time. This is  
13 almost the dimensions of this, although this--

14 Q Just so it will be clear on the tape,  
15 you're saying the two dimensions are--the points  
16 that you have made on the plastic skull are  
17 approximately the same as the dimensions on the  
18 drawing in Exhibit 1?

19 A Yes, and I can't--I can't fit a 19-  
20 centimeter margin into this.

21 Q Into the cranium of the plastic skull.

22 A Into the base of the cranium. This really

1 should be right above. It should be all the way  
2 down here.

3 Q When you say this should be down here, you  
4 mean--

5 A This last, the most posterior mark,  
6 because this comes across like this.

7 Q But that's fine. You should just go ahead  
8 and draw that one. And, again, I understand that  
9 this is approximate and it's a difficult task.

10 A And then this comes around like so. And  
11 that is very crude. That's about the space that  
12 we're talking about, though, with approximate  
13 measurements.

14 Q Okay. What I'm going to do, if this is  
15 all right, is to call this Line 1 on Exhibit No.  
16 74. I'll draw a 1 in a circle to signify that the  
17 line going across the top of the skull is the  
18 portion, if I understand correctly, of the skull  
19 that was missing when you first began the autopsy.  
20 Is that correct?

21 A Right.

22 Q Now, I'd like to ask you to describe for

1 me just in words as best you can what portions of  
2 the scalp were missing when you first began the  
3 autopsy?

4 A Actually, very little. This drawing is  
5 somewhat deceptive, but there was--

6 Q When you say "this drawing," you're  
7 referring to MI 13?

8 A MI 13, in that we were able to--the  
9 morticians were able to cover this defect  
10 completely by using some sort of plastic to cover  
11 the brain cavity, because there wasn't much bone to  
12 replace the brain cavity. But they were able to  
13 use his scalp to almost completely close the wound.

14 Q So it would be fair to say that although  
15 there was a very large piece of skull missing,  
16 there was very little scalp missing?

17 A Right.

18 Q Do you recall whether there were tears or  
19 lacerations in the scalp?

20 A Right across here and--

21 Q Approximately across the midline?

22 A What I previously described, post-

1       occipital, and on the left, across the top, and  
2       then down to the right frontal area, and then the  
3       laceration extended into the right eye.

4           Q     Okay. Could you make another drawing--and  
5       we'll put Line No. 2 on this--to show the  
6       approximate direction of the large laceration that  
7       you just referred to?

8           A     Well, it's not a--I can't say what  
9       direction, but--and then this came on down like so,  
10      and--actually, I think it came right into here.

11          Q     Okay. I'm going to put a 2 in a circle  
12      right next to that line, and the 2 will signify the  
13      approximate direction and shape of the large  
14      laceration. Would that be fair?

15          A     Mm-hmm.

16          Q     During the course of the autopsy, did any  
17      skull fragments, in addition to the three that  
18      you've already shown on the X-ray drawing, come to  
19      the autopsy room?

20          A     No.

21          Q     Just those three?

22          A     Well, I'm not sure all of them came in

1 that night. Probably just this one. And then the  
2 other two I think came later. I know we had them  
3 by the time we examined the brain.

4 Q When you say "just this one," you're  
5 referring to the drawing on the bottom of Exhibit  
6 1; is that correct?

7 A Yes.

8 Q Did you have skull fragments with you at  
9 the time of the supplementary examination of the  
10 brain?

11 A Yes.

12 Q How many fragments did you have, as best  
13 you recall?

14 A I think there were three.

15 Q Do you know whether those fragments were  
16 X-rayed at about the time of the supplementary  
17 examination?

18 A I'm sure they were.

19 Q Did you see them being X-rayed during the  
20 supplementary examination?

21 A I don't know.

22 Q Did you see any X-rays of the three

1 fragments during the time of the autopsy?

2 A One.

3 Q Just one?

4 A The one piece that's on that diagram here.

5 Q When you first saw President Kennedy's  
6 head, was there any brain tissue that was extruding  
7 from the hole in the top of the head, or was it all  
8 roughly within the cranium?

9 A I'm sorry. I can't--I don't remember  
10 that.

11 MR. GUNN: Let me go off the record for a  
12 minute.

13 [Discussion off the record.]

14 [Recess.]

1

AFTERNOON SESSION

2

Whereupon,

3

DR. J THORNTON BOSWELL

4

resumed the stand and, having been previously duly  
sworn, was examined and testified as follows:

6

BY MR. GUNN:

7

Q We have now taken a lunch break, and I  
would like to go back to the exhibit, the skull  
that is marked as Exhibit 74. I'd like to ask you,  
Dr. Boswell, if you could give me just your own  
assessment of how the dimensions of the skull that  
we have here compare, again, in just a very general  
way, to the skull for President Kennedy.

14

A The marks that I've made are really very  
approximate to the dimensions that are in our  
written report. And the skull is probably smaller  
than President Kennedy's, and the marks that we've  
made on the skull are very approximate.

19

Q Would it be your impression that, first,  
the markings that are contained in the face sheet,  
Exhibit 1, and in the autopsy protocol are  
accurate?

1           A     Yes.

2           Q     So those are accurate. And would it be  
3 fair to say that the markings that you have put on  
4 the skull are approximate dimensions based upon  
5 what you considered to be the accurate markings  
6 that are in the autopsy protocol and the face  
7 sheet?

8           A     That's true, and these really only  
9 indicate sort of the magnitude of the wound and the  
10 approximate position of it.

11          Q     And would you say that the drawings that  
12 you have made on the skull are roughly proportional  
13 to the size of the skull rather than the actual  
14 centimeter marking?

15          A     True, true. That's good.

16          Q     Dr. Boswell, I'd like to talk to you about  
17 the order of procedures as they took place on the  
18 night of the autopsy. We have discussed already  
19 the arrival of the casket and the removal of the  
20 body. I'd like you now to tell me what the first  
21 procedure was that was performed in terms of the  
22 examination of President Kennedy.

1           A     The external examination was done first,  
2 and as soon as the body had been examined, the  
3 photographer was brought in and various  
4 photographs, external photographs, were taken, at  
5 which point we then backed away and permitted the  
6 radiologist to X-ray the entire body, and then we  
7 began further external examination and dissection  
8 while awaiting the development of the X-ray film.  
9 Then the wounds of entry and exit were studied  
10 preliminary to an examination of the abdominal and  
11 thoracic cavity. The neck wound was determined--  
12 its direction and dimension was determined after we  
13 had opened the thorax and been able to review the  
14 right thoracic cavity, which was the midpoint of  
15 the wound.

16           Q     When was the wound on the back of the body  
17 first located? Was that right at the beginning of  
18 the autopsy, or did that come later in the autopsy,  
19 the wound that you've described as the neck wound?

20           A     That was recognized fairly early in the  
21 autopsy because that--we began studying that first  
22 trying to determine if a bullet was present.

1           Q     With respect to the photographs, was  
2 anything done to the skull or to the hair to  
3 prepare it for the photographs? For example, was  
4 the hair cleaned at all? Was the hair parted in  
5 any way or any skull fragments put in before the  
6 photographs were taken?

7           A     Well, photographs were taken at various  
8 stages. The scalp was pulled forward in order to  
9 demonstrate the wound of entrance. And then the  
10 scalp was reflected to show the magnitude of the  
11 wound and more or less the direction of the bullet,  
12 and then to remove the brain.

13          Q     Just so I'm clear--and we'll be looking at  
14 the photographs in a few minutes, and you can maybe  
15 clarify it there. But at least with some of the  
16 photographs, is it your testimony that the scalp  
17 was pulled in a way different from how it was when  
18 you first saw it in order to better illustrate  
19 either wound of entry or exit?

20          A     Yes. The scalp was essentially loose. In  
21 the usual autopsy, you have to cut underneath the  
22 scalp in order to reflect it. In this case, the

1 scalp was mobile so that you could pull it forward  
2 to obscure the wound or pull it back to make the  
3 wound completely lucid.

4 Q Okay. Was the hair cleaned in any way for  
5 purposes of the photographs?

6 A No, I don't think so. There was not a lot  
7 of blood, as I remember, and I think he had been  
8 pretty well cleaned up in the operating--in the  
9 emergency room. And I don't think we had to do  
10 much in the way of cleansing before we took  
11 photographs.

12 Q Were any skull fragments put back into  
13 place before photographs or before X-rays?

14 A I think before we took the--the ones that  
15 came from Dallas were never put back in except to  
16 try and approximate them to the ones that were  
17 present. But I think all the others were left  
18 intact.

19 Q So, for example, was there a fragment that  
20 had fallen out at any point that you then put back  
21 into its place before a photograph or X-ray was  
22 taken?

1           A     Yes.

2           Q     What size fragments and where did you  
3 place them at the--

4           A     Well, the one that's in the diagram on  
5 Exhibit 1, that 10-centimeter piece I'm sure was  
6 out at one time or another. And I think maybe some  
7 of these smaller fragments down at the base of that  
8 diagram also were out at one time or another. But  
9 those were all put back.

10          Q     Okay. And you're referring to page 2 of  
11 Exhibit 1?

12          A     I'm sorry. Yes.

13          Q     Was a Y incision ever made on President  
14 Kennedy?

15          A     Yes.

16          Q     Would you look at page 4 of Exhibit 26,  
17 which, again, were the notes taken of your  
18 interview with HSCA members?

19          A     The second paragraph?

20          Q     The first full paragraph, down at the last  
21 few sentences.

22                 It appears to me that this is reporting

1 you to have said that a Y incision was not made.  
2 Was that recorded correctly, or do you recall now  
3 whether there was a Y incision?

4 A Well, there would have to be a Y. This  
5 was misunderstood. We went into the chest first,  
6 and then the Y incision was extended.

7 Q So when you say "this was misunderstood,"  
8 you're referring to the phrase in the document  
9 Exhibit 26 that says there was no Y incision?

10 A Said they didn't do a Y, but we examined  
11 the chest first and then we ultimately extended the  
12 incision to a Y and went into the abdomen.

13 Q Could you look at the first sentence of  
14 the following paragraph that begins, "Dr. Boswell  
15 indicated that we had gotten ourselves in Dutch  
16 with the neck and throat wounds with regard to the  
17 Secret Service"? Do you see that?

18 A Yes.

19 Q Does that seem accurate to you in terms of  
20 recounting what you said?

21 A Yes.

22 Q What did you mean by gotten yourself into

1 Dutch with the Secret Service?

2 A Well, that they were reporting things and  
3 some of the things that they told people became  
4 public and they just hadn't gotten the entire  
5 information.

6 Q So how was it misreported or--

7 A There was some question you asked me  
8 earlier that they had--oh, it was about the probing  
9 of the wound, and they said that we probed and  
10 couldn't find it and thought that the bullet must  
11 have been knocked out while--during the  
12 resuscitation. That was the sort of thing that was  
13 happening while they were on the phone.

14 Q Did the Secret Service ever come and talk  
15 to you about that during the course of the autopsy  
16 or subsequently about that issue?

17 A No.

18 Q Did you understand that the Secret Service  
19 was displeased in some way with anything to do with  
20 neck or throat wounds in the autopsy?

21 A No. Those people were in such an  
22 emotional state that they were running around like

1 chickens with their heads off, and we understood  
2 their problem. But we never talked with them  
3 directly. They misquoted an awful lot of things  
4 that we said or did.

5 Q Let me ask you a question from the autopsy  
6 manual. This goes to the Y incision. I'd like to  
7 have you look at the diagram on page 5 which shows  
8 the incisions. Could you describe whether the Y  
9 incision on President Kennedy followed that marked  
10 on Exhibit 5 or whether it differed in some way?

11 A Well, initially, we did this because we  
12 were only going to do a thorax.

13 Q You mean the incision that would go right  
14 below the nipples?

15 A Right.

16 Q From the armpits underneath--

17 A Actually down just above the diaphragm.  
18 Beneath the nipples and just above the diaphragm.  
19 But then when we were permitted--see, I was trying  
20 to find the adrenal glands through the diaphragm  
21 from above.

22 Q So it's just the top part, the

1 semicircular part, without opening anything down to  
2 the--

3 A Right.

4 Q --middle of--

5 A With it open like this, you can get down--  
6 you can get the lungs and the heart, get the neck  
7 organs and so forth out. But you can't get down  
8 into the liver and stomach and so forth. So I was  
9 trying to palpate through the diaphragm the  
10 adrenals, and I couldn't find them because he  
11 didn't have any. And so we talked to Burkley at  
12 some point, and we were able to go in and get the  
13 kidneys out where the adrenals sit on top of.

14 Q So you made a vertical incision that would  
15 come down from the sternum--

16 A Right.

17 Q --down--

18 A Exactly.

19 Q At what point during the autopsy was the  
20 brain removed?

21 A I can't be sure, but I think that we did  
22 the brain first before we did the dissection of the

1        thorax and abdomen. But I can't be sure about  
2        that. I mean, normally, it would be the last thing  
3        to be done. But since it was the prime thing in  
4        the autopsy, I sort of have a feeling that we did  
5        that first. But I won't say for sure.

6            Q        Was it necessary to make any incisions in  
7        the scalp in order to remove the brain?

8            A        No.

9            Q        Was it necessary to saw any of the bones  
10      in the cranium?

11          A        No.

12          Q        Who was it who removed the brain?

13          A        I think Jim Humes did, but I can't be sure  
14      of that.

15          Q        Do you recall whether there were any  
16      difficulties in conjunction with removal of the  
17      brain?

18          A        No.

19          Q        Do you recall whether it was particularly  
20      easy to remove the brain?

21          A        I think it was a routine procedure. In  
22      Dallas, they had said that the cerebellum was the

1 part of the brain that was injured and exuding.  
2 But they were wrong because the cerebellum is  
3 enclosed in a dural sort of compartment, and in  
4 order to get the cerebellum out, you have to cut  
5 the dura around, and then you--that's the only hard  
6 part about getting the brain out. And the manner  
7 in which we were doing it, both the cerebral  
8 hemispheres were already exposed without dura, and  
9 it was really very simple to take out.

10 Q During the course of the autopsy, did you  
11 have an opportunity to examine the cerebellum?

12 A Yes.

13 Q And was there any damage to the cerebellum  
14 that you noticed during the time of the autopsy?

15 A No.

16 Q So both the right and left hemisphere of  
17 the cerebellum were intact?

18 A Yes.

19 Q Was the tentorium damaged at all?

20 A No.

21 Q Do you recall whether Colonel Finck  
22 arrived before or after the brain was removed?

1           A    Oh, before.

2           Q    Do you remember in terms of the general  
3 chronology of events when the skull fragment or  
4 fragments arrived? Was that very late in the  
5 autopsy? Do you recall?

6           A    I think like midway. The one. I think  
7 the others came after we had finished.

8           Q    Okay.

9           A    Or maybe toward the end.

10          Q    Drs. Finck and Humes have both referred to  
11 the arrival. Dr. Finck said close to midnight, and  
12 Dr. Humes said, "I wouldn't wish to guess, but I  
13 would have guessed it was midnight or 1 o'clock in  
14 the morning." Does that seem to you to be  
15 approximately correct? Or would your memory be  
16 that it was earlier?

17          A    Oh, I think it was midnight.

18          Q    Dr. Boswell, were you present during the  
19 time President Kennedy was embalmed?

20          A    Yes.

21          Q    Did you participate in that at all, or did  
22 you just observe?

1           A    We just observed.

2           Q    Did the skull fragment arrive prior to or  
3 after the beginning of the embalming?

4           A    Prior to.

5           Q    Was the fragment placed into the cranium  
6 in the course of the embalming?

7           A    No.

8           Q    Was it kept separate from the body?

9           A    Yes.

10          Q    Who took possession of that fragment, if  
11 you recall?

12          A    I think it was retained with the brain in  
13 Smoky Stover's office. It was put in his closet,  
14 in the closet of his office, and locked up that  
15 night. And then I would assume--but I don't know--  
16 that the bone fragments went with all the rest of  
17 the material down to the White House, although it  
18 may have been kept by the Secret--or by the Warren  
19 Commission. I'm not sure.

20          Q    Is there a standard procedure, the best  
21 you know, for keeping fragments of bones or skull  
22 with the body or not with the body when there is a-

1 -when it is a forensic case?

2       A     Usually that's part of the forensic  
3 material that's retained for courts and trials and  
4 so forth.

5       Q     So it would be your understanding it would  
6 be a normal autopsy procedure, normal forensic  
7 autopsy procedure, to keep certain parts of the  
8 body as evidence for potential trial?

9       A     True.

10      Q     I'd like to shift the direction a little  
11 bit now and talk to you about records. The first  
12 question would be: Who during the course of the  
13 autopsy took any records or notes that you recall?

14      A     I think Jim Humes and Bob Karnei, who was  
15 our senior resident working with us that night, and  
16 myself did all the note-taking. And then Jim took  
17 all our collected notes with him to write up the  
18 autopsy.

19      Q     Did he take them on the--I guess very  
20 early on the morning of the 23rd, or did he take  
21 them later?

22      A     He took them with him home at midnight.

1 Smoky called us--Jim took the bucket with the brain  
2 and whatever else--we had the tissue samples for  
3 microscopy. We took all that up to our offices and  
4 into Smoky's office, and at that time, it was  
5 thought that there was some sort of a cabal and  
6 that some--you know, anybody was likely to be  
7 killed, Johnson or anybody else. And Smoky says,  
8 J, you take Jim home. So I got in my car behind  
9 Jim Humes, and I followed him home. And then I  
10 went home, and he stayed up the rest of the night  
11 writing up the autopsy.

12 Q When did you first see a draft of the  
13 autopsy?

14 A The next morning.

15 Q Approximately what time?

16 A Ten o'clock.

17 Q What were the circumstances when you saw  
18 it? Did you go to his home, or was it at the  
19 hospital?

20 A I went to the hospital.

21 Q Was the first draft, do you recall,  
22 handwritten or typed?

1       A     Well, he had written--he had handwritten  
2 one, and then he rewrote it. And I don't know  
3 whether I saw that or--I think maybe it was typed  
4 before I saw it. I don't think I ever saw a  
5 handwritten copy.

6       Q     Now, is it--well, did you see a version of  
7 the autopsy at about 10 o'clock at the hospital--

8       A     Yes.

9       Q     --on Saturday? And that one was  
10 handwritten?

11      A     No. That--

12      Q     That was typed?

13      A     I'm almost sure that was already typed.

14      Q     Now, was it your understanding that Dr.  
15 Humes wrote a handwritten version immediately after  
16 the autopsy and that he then wrote a subsequent  
17 draft, handwritten again, and that one was  
18 subsequently typed?

19      A     Yes.

20      Q     That's the chronology that you understand?

21      A     Right.

22      Q     Did you ever talk to him, that is, Dr.

1       Humes, about the contents of the first draft of the  
2       autopsy?

3           A     No.

4           Q     Do you know whether he spoke to anyone  
5       about the contents of the first draft of the  
6       autopsy, such as Captain Stover?

7           A     He's talked to an awful lot of people  
8       about that.

9           Q     I don't mean after the fact, but I mean--

10          A     I mean investigating committees and all  
11       sorts of people, because he burned--I don't know  
12       why that wasn't burned, but he--

13          Q     You're referring to Exhibit 1?

14          A     Yeah. He--anything with blood on it--and  
15       that obviously had blood on it. It's watermarked.  
16       He was working on a card table in front of his  
17       fireplace, and he was throwing drafts and redrafts  
18       and so forth into the fireplace. And he's  
19       described that to many people.

20          Q     Do you know whether he talked--my question  
21       does not go to subsequent investigations, but  
22       contemporaneously at the time he was writing it, do

1 you know whether he spoke to anyone about the  
2 contents of the first draft prior to the second  
3 draft?

4 A I'm not aware of anybody.

5 Q Did you ever see the notes that Dr. Humes  
6 took during the course of the autopsy?

7 A No. I'm trying to think what notes he  
8 might have taken. I don't see his handwriting on  
9 that.

10 Q You mean Exhibit 1?

11 A Right. I don't think I saw any of his  
12 notes.

13 Q Do you have any recollection of seeing Dr.  
14 Karnei's notes you previously mentioned?

15 A I think that maybe Karnei may be the one  
16 who wrote those measurements on Exhibit 1. What  
17 else he may have written on it, I don't remember.

18 Q Did Dr. Humes ever return to you  
19 personally Exhibit 1 or any other notes that you  
20 took?

21 A No.

22 Q Did you take any notes yourself other than

1 what is contained in Exhibit 1?

2 A No.

T3A 3 Q Did you see anyone else at Bethesda taking  
4 notes other than yourself, Dr. Karnei, and Dr.  
5 Humes?

6 A No.

7 Q For example, FBI agents or Secret Service?

8 A I didn't see anybody writing.

9 Q I'd like to ask you about the kinds of  
10 records that would typically be generated in the  
11 course of an autopsy at Bethesda in the 1960s. So  
12 in addition to notes that may have been taken by  
13 doctors or prosecutors during an autopsy, were  
14 there, for example, audiotape recordings of  
15 autopsies?

16 A No.

17 Q Have you ever heard of any audiotapes ever  
18 being made of autopsies?

19 A Oh, yes.

20 Q Do you know when those started in  
21 relationship to 1963?

22 A Oh, at least when I started my residency

1       in the '50s--'52, '53. We were using audiotapes in  
2 those days.

3       Q     But you don't know of audiotapes having  
4 been used at Bethesda?

5       A     We did occasionally. We were training  
6 residents there, and we usually would take the long  
7 road. But recording with audio was done.

8       Q     Was there any reason that there was not an  
9 audio recording of President Kennedy's autopsy that  
10 you know of?

11      A     Well, probably a number of reasons.  
12 Certainly with the number of people and the noise  
13 in there, it probably wouldn't have been a good  
14 idea. But when you have three prosecutors plus so  
15 many other people working, it would not have  
16 worked.

17      Q     Did you ever hear any discussion about  
18 whether there should or shouldn't be an audiotape  
19 made of the autopsy?

20      A     That's one thing I've never heard anybody  
21 complain about.

22      Q     Was it ever the custom or practice to have

1 somebody take minutes or notes of proceedings of an  
2 autopsy?

3 A Always.

4 Q Was there somebody who did that?

5 A Well, basically I was taking the notes,  
6 for the most part.

7 Q And by those notes, you're referring to  
8 Exhibit 1?

9 A Right.

10 Q Was it ever the practice, as far as you're  
11 aware, to have someone like, we'll say, a full-time  
12 stenographer or something of that sort taking more  
13 comprehensive notes than Exhibit 1?

14 A We didn't do that at Bethesda. There are  
15 pathology departments that have done that for  
16 years.

17 Q And as far as you recall, there was no  
18 person who did that for President Kennedy's  
19 autopsy?

20 A True. That's right.

21 Q Were there any kind of records that were  
22 created to, for example, log the receipt of the

1 body or the departure of the body?

2 A Yes.

3 Q How would those be recorded?

4 A There was a morgue log book that I'm sure  
5 would have recorded the receipt and disposition of  
6 the body.

7 Q Does that have any other name other than  
8 morgue log book that you're aware of?

9 A That's all.

10 Q That would be the correct term for it.

11 Were there any similar logs for receipt of  
12 organs or tissues or sections? How would those be  
13 recorded or tracked?

14 A If they're brought into the morgue at a  
15 time other than when the autopsy was going on, they  
16 would be put in the log book.

17 Q Would that be the same as the morgue log  
18 book?

19 A Yes.

20 Q So let's suppose that several sections  
21 were made from the brain and they were taken out  
22 for examination.

1           A     Oh, in that--no. We had regular sessions  
2 with people either coming to the morgue for organ  
3 reviews or brain examinations and stuff like that.  
4 And they occasionally would take parts back with  
5 them to the AFIP or wherever they came from. But I  
6 don't think usually those are logged in or out.

7                 Now, those people taking those away  
8 probably would render a report. So a report would  
9 have been sent back to us that that sample had been  
10 removed a certain day, certain examinations were  
11 done, and the results are reported herewith, that  
12 sort of thing.

13          Q     Did you ever see any documents like that  
14 for President Kennedy?

15          A     No.

16          Q     Do you know whether there were ever any  
17 such documents created?

18          A     No, because all the materials that we took  
19 out of the body were processed and returned to the  
20 White House, and our supplementary report reflected  
21 all the work that was done.

22          Q     Did anyone other than Dr. Humes have any

1 responsibility for conducting microscopic  
2 examination of the tissues?

3 A I think I did that.

4 Q Okay. I'd like to show you a document,  
5 Exhibit 4, and see if that helps with your  
6 recollection. I'll state for the record that's the  
7 supplementary report of autopsy of President  
8 Kennedy.

9 A These are Jim's description. Now, what  
10 was your question?

11 Q Just who performed the microscopic  
12 examination or any other of the examinations on the  
13 tissues?

14 A Well, Jim Humes and I did the brain. I  
15 see he has described the microscopic. I also went  
16 over those slides. But these are his description.

17 Q You're referring now to Exhibit 4?

18 A Yes.

19 Q I'd like you to look at Exhibit No. 26 on  
20 page 8. This, once again, are staff notes from the  
21 interview of HSCA. I'd like you to read the  
22 paragraph beginning with "Dr. Boswell said the

1 tissue people." If you could read that through the  
2 end of the paragraph, please?

3 [Pause.]

4 THE WITNESS: Okay.

5 BY MR. GUNN:

6 Q Is that paragraph a reasonably accurate--

7 A Yes.

8 Q --recording of your recollection?

9 A Mm-hmm.

10 Q So when you say tissue people were given  
11 the tissue, whom were you referring to?

12 A The people that prepare the slides. At  
13 autopsy, you cut out small samples of all the  
14 organs, and the margins of things like the bullet  
15 wounds of entry and that sort of thing, and then  
16 after that's fixed for a while in formalin, you  
17 take smaller pieces of those, and then that is  
18 processed for dehydration and infiltration with  
19 paraffin. Those are put in paraffin blocks, and  
20 then sections are made to be examined under the  
21 microscope, stained and examined under the  
22 microscope.

1           So, actually, I gave those to the people  
2 at midnight, or earlier, probably 10:30, 11 o'clock  
3 at night, and they processed those that night. And  
4 when I came in the next day, they were ready for me  
5 to examine.

6           Q     Was there any record created of the  
7 transfer of the tissue from you to the testing  
8 personnel and then back? Or was that done without  
9 records?

10          A     Well, that's done without records. An  
11 autopsy is given a number, and then this--I don't  
12 see the number here, but, anyway, they--here it is.  
13 And then all the tissue is processed with that  
14 number, and there are so many tiny pieces, and they  
15 require a little tag that's put through with them.  
16 And that's in an autopsy log in the laboratory  
17 separate from the morgue log, and that number and  
18 the patient is logged in. And then there are logs  
19 probably in the secretary's part of the laboratory  
20 where they type this up and that's--this number and  
21 name is put in their records.

22          Q     So that you would expect there to be some

1 kind of log book that would show the receipt of the  
2 sections, the testing, the results of the test, and  
3 then sending the--

4 A Yes.

5 Q --sections back? Now, in the paragraph  
6 that I showed you a moment ago from page 8 of  
7 Exhibit No. 26, it refers to this, the sections  
8 being available from around noon on the 23rd; is  
9 that correct?

10 A Right.

11 Q So that would have been Saturday at  
12 approximately noon?

13 A Yes.

14 Q Now, previously you mentioned that it was  
15 your understanding that Dr. Humes had a draft of  
16 the autopsy protocol that was available about 10  
17 o'clock that morning; is that right?

18 A Yes.

19 Q And do you remember that the draft was  
20 available prior to the time that the sections had  
21 been returned from tests?

22 A Yes. But the microscopic wasn't part of

1 the draft.

2 Q Exactly. Sure.

3 Were you present when the results of the  
4 testing were dictated?

5 A No.

6 Q Do you know when the dictating took place  
7 on the microscopic sections?

8 A No.

9 Q Do you know, for example, whether that was  
10 on the 23rd at approximately the time they were  
11 received, or later?

12 A We looked at the slides together Saturday  
13 around noon. But he had not dictated the autopsy  
14 at that time.

15 Q I mean the supplementary report for--

16 A Well, I'm not sure he had dictated any of  
17 it at that time. He had handwritten out the gross  
18 autopsy. And maybe I--I might have reviewed with  
19 him his handwritten draft at that time. I can't  
20 remember that. But at some time we went over it  
21 together, because I'm sure we discussed points and  
22 made changes and so forth. But that was done

1 Saturday early afternoon.

2 Q Okay. Was anyone else present when you  
3 examined the sections around noon on the 23rd? For  
4 example, was Dr. Finck there?

5 A He was not there.

6 Q Was Dr. Karnei there?

7 A He was probably there, and probably others  
8 of our staff.

9 Q Did you conduct any examination of the  
10 brain at that time?

11 A No.

12 Q Was a section made of the wound of  
13 entrance on the neck or back?

14 A Both.

15 Q Do you recall what the results of that--  
16 was there a subsequent testing of the back/neck  
17 wound?

18 A Other than the microscopic?

19 Q Yes.

20 A No.

21 Q Do you recall whether the results of that  
22 test were recorded anywhere?

1           A     Yes. I think they're here.

2           Q     Could you show me where that is located,  
3 the microscopic examination of the--

4           A     On page 2 of Exhibit 4, at the bottom of  
5 the page, skin wounds. It describes the sections  
6 taken through the margins of both the skin wounds.

7           Q     And do you see the reference there to the  
8 coagulation necrosis?

9           A     Yes.

10          Q     Can you tell me what that signifies?

11          A     Like burning.

12          Q     And did that have any bearing on  
13 determination of whether that was an entrance  
14 wound?

15          A     No. The size and configuration of the  
16 entrance wound are the two most important things.

17          Q     Did you see any written results of tests  
18 on any of the tissues of President Kennedy, other  
19 than the document that's in your hand now, Exhibit  
20 4?

21          A     I'm sorry?

22          Q     Did you see any written reports of any

1 tests performed on any of the tissues from  
2 President Kennedy's body, other than Exhibit 4,  
3 which is in your hand now?

4 A No.

5 Q Prior to the time that you signed the  
6 autopsy protocol, which is Exhibit 3, did you  
7 discuss the substance of the autopsy with anyone  
8 other than Drs. Humes and Finck?

9 A Well, I'm sure my wife. She had been  
10 staying up all night waiting for me to get home.  
11 There was a--the neuropathologist at the AFIP was  
12 home when I got there, and I think I probably  
13 discussed some of it with him, some of the  
14 evening's events and so forth.

15 Q Do you remember the circumstances when you  
16 signed the autopsy protocol, Exhibit 3? Do you  
17 remember what day of the week it was or time of  
18 day?

19 A This was done on Sunday, wasn't it?

20 Q It's not dated. You're referring to  
21 Exhibit 3?

22 A Yes. I'm almost sure that this was

1       executed on Saturday or Sunday, because Jim took it  
2       down to Admiral Burkley. I can't be positive at  
3       this moment.

4           Q     At the time that you signed this, was  
5       anyone else in the room with you? Do you recall?  
6       "This" being Exhibit 3.

7           A     Yes. I think that Pierre Finck, Jim  
8       Humes, and Smoky Stover and I were in the room.  
9       Yeah, I think we were the only ones there at the  
10      time we signed it.

11          Q     Was there any discussion that you recall  
12      about anyone wanting the autopsy protocol to read  
13      one way rather than another or any changes that  
14      were being asked to be made to it by anyone?

15          A     No one from outside, and Jim and Pierre  
16      and I went over it quite carefully item by item and  
17      discussed everything in it, as to contents and  
18      accuracy and so forth. I do remember that we spent  
19      quite a bit of time just preliminary to signing it.

20          Q     Was there any discussion at all about  
21      someone from outside of that group wishing to make  
22      any changes or alterations to the autopsy protocol?

1       A     None.

2       Q     Did you ever sign more than one version of  
3 the autopsy protocol? For example, was there one  
4 draft that was written that you signed and then  
5 subsequently made a decision to make changes?

6       A     No.

7       Q     There was just one version.

8              Previously in the deposition, you've made  
9 reference to there being a probe to help track the  
10 direction of the neck wound. Do you recall that?

11      A     Mm-hmm.

12      Q     Could you tell me about how long the probe  
13 was or describe the dimensions of the probe?

14      A     It's a little soft metal instrument that  
15 looks like a needle with a blunt end on one end and  
16 a flattened end on the other, like a needle that  
17 you would knit with or something. And it's, I  
18 would say, eight inches long, blunt on one end and  
19 sort of has a sharp point on the other end.

20      Q     Were there any X-rays taken with the probe  
21 inside the body that you recall?

22      A     No.

1           Q     How far in did the probe go?

2           A     Very short distance. Three inches, about.

3           Q     Were there any photographs taken with the  
4 probe inserted?

5           A     I doubt it.

6           Q     I believe from your earlier testimony you  
7 said that you were present for the subsequent  
8 supplementary examination of the brain. Is that  
9 correct?

10          A     Yes.

11          Q     Who else was present for that examination?

12          A     I can't be sure about this. I am sure  
13 that Jim and I were there. I think probably Pierre  
14 was not, but I think the neuropathologist from  
15 AFIP, Richard Davis, was there. And then I'm sure  
16 much of our medical staff from the laboratory, I  
17 think they probably all would have been there.

18          Q     So there were quite a number of people  
19 there?

20          A     Yes.

21          Q     Just in a rough way, is this between 6 and  
22 12 or approximately how many?

1           A     I would say probably 15, maybe. It was  
2 President Kennedy's brain.

3           Q     Do you remember whether anyone named  
4 Stringer was present?

5           A     Yes. He was the photographer.

6           Q     Did he take photographs at that time, as  
7 best you recall?

8           A     Throughout the autopsy and the subsequent  
9 brain examination. I was thinking about that last  
10 night, and he had an assistant or two. They train  
11 people in medical photography. And I'm not sure if  
12 he was present throughout all this or one of his  
13 assistants. I'm almost positive he was there  
14 throughout the autopsy. The same is true of the  
15 radiologist. He had residents and assistants also,  
16 and I know there were at least a couple of  
17 radiology technicians moving film about and so  
18 forth.

19           Q     Were any of the radiologists present  
20 during the supplementary examination of the brain?

21           A     I doubt it.

22           Q     Do you recall Dr. Humes ever having made

1 reference to Admiral Burkley's desire that the  
2 brain be interred with the body?

3 A No.

4 Q Do you recall ever having heard anyone  
5 discuss the issue of whether the brain should be  
6 interred with the body?

7 A I'm sure that in years past that  
8 discussion has come up, but I can't remember who  
9 and where.

10 Q In addition to the supplementary  
11 examination of the brain that we've been discussing  
12 and the examination of the tissues from around noon  
13 on the 23rd, did you participate in any other  
14 supplementary examinations of tissues related to  
15 President Kennedy?

16 A Not at that time.

17 Q When did you at some other time?

18 A When the material was returned to the  
19 Archives.

20 Q Okay. When you say "when the material was  
21 returned to the Archives," you're meaning two or  
22 three years--

1           A     Slides--yes.

2           Q     During the time that the material was  
3     returned to the Archives, what do you remember  
4     there being in the way of, I will call it,  
5     biological material, anything related to President  
6     Kennedy's body or tissues?

7           A     Slides, microscopic slides. And I can't  
8     remember if there were paraffin blocks. I believe  
9     there were paraffin blocks, but I'm not sure.  
10        Then, of course, photographs and X-rays. And I  
11     can't remember whether--those bone fragments may  
12     have been within the--are they still in the  
13     archival material? They're not? At some point  
14     they were. I think I saw them at the Archives at  
15     some point.

16        Q     Okay. Other than the subsequent  
17     examination at the Archives, is it your testimony  
18     that you only participated in examinations of the  
19     tissues at two times after the initial autopsy? Is  
20     that fair?

21        A     We went down and--when the material first  
22     came back, we went down--Jim Humes, Stringer, and

1 the radiologist, Dick somebody or other, and I--and  
2 we went through all the material and numbered it  
3 and signed it and logged it back in. And then that  
4 group of physicians, we asked for pathologists and  
5 radiologists, and I guess there were all kinds of  
6 people in that group. We went through it again  
7 with them that time. Then I think that was the  
8 end.

9 Q Okay. So just in terms of the time around  
10 the autopsy, there were no other opportunities that  
11 you had to examine tissues other than the two we've  
12 discussed?

13 A All the material went to the White House  
14 right after the autopsy, within a week.

15 Q Do you remember during your supplementary-  
16 -or during your subsequent review at the National  
17 Archives ever seeing something like a stainless  
18 steel container?

19 A I don't remember that. Can you tell me  
20 what was in it?

21 Q That's sort of the question that we are  
22 interested in. There are some records about there

1 having been a stainless steel container at the  
2 Archives. I don't know whether you would have seen  
3 that or not. I just want to see if--

4 A I'm trying to think how the paraffin  
5 blocks--it seems to me the slides and paraffin  
6 blocks were in a wooden microscopic slide box. I  
7 don't think that was in a metal container. And  
8 that's all there was.

9 Q Previously, you have mentioned that you  
10 were aware that--or you had heard that Dr. Humes  
11 had destroyed or burned some of the notes or  
12 records related to the autopsy. Have you ever  
13 discussed that issue in any depth with Dr. Humes?

14 A Yes, we've--I've been present when he's  
15 told the story.

16 Q He has told the story related to the  
17 assassination of President Lincoln--

18 A No. No, the story of writing up the  
19 report and putting the paper in the fireplace.

20 Q What is your understanding of the reason  
21 that he burned the papers from President Kennedy's  
22 autopsy?

1           A     Same reason he washed the sheets. He  
2 didn't want this material in a museum barn out on  
3 66.

4           Q     Did you yourself ever destroy any records  
5 created at or about the time of the autopsy as they  
6 related to the autopsy of President Kennedy?

7           A     No. Actually, the only records that I was  
8 involved in were the ones on the table here.

9           MR. GUNN: I'd like to take a short break  
10 while I have some of the photos and X-rays brought  
11 in.

12                 [Recess.]

13           MR. GUNN: We now have in the room with us  
14 the autopsy photos in the possession of the  
15 National Archives as well as the X-rays, and I'd  
16 like to ask Dr. Boswell some questions about them.  
17 I have just handed to Dr. Boswell a document marked  
18 Exhibit 13, which on its face is the report of  
19 inspection by naval medical staff on November 1,  
20 1966, at National Archives of X-rays and  
21 photographs of the autopsy of President John F.  
22 Kennedy.

1 BY MR. GUNN:

2 Q Dr. Boswell, have you previously seen the  
3 document that's marked Exhibit 13?

4 A Yes, I have.

5 Q Is that your signature on the last page,  
6 the second signature down?

7 A Yes.

8 Q And could you tell me just in very brief  
9 form how you came to sign the document that's now  
10 marked Exhibit 13?

11 A We were notified that the material had  
12 been returned to the Archives, and those of us who  
13 signed went down to the Archives and met Mr.  
14 Rhoads, or Dr. Rhoads, and all the material was  
15 brought out to us, and we reviewed it all, re-  
16 identified it and labeled it and authenticated it.

17 Q Okay. So it was your understanding that  
18 this procedure that you were involved in was, at  
19 least in part, to assist the Archives in properly  
20 cataloguing and labeling the autopsy photographs  
21 and X-rays--

22 A Yes.

1           Q     --would that be fair? Now, you notice,  
2 for example, on page 4 where it is referring to 4-  
3 by-5 black and white negatives, you can see right  
4 next to No. 1 where there is the statement that the  
5 negative depicts the "left side of head and  
6 shoulders." Do you see that?

7           A     Yes.

8           Q     I'm going to be making reference to the  
9 language in this 1966 report as we discuss the  
10 photographs today, so I'll be referring to the  
11 language there, and you should feel free at any  
12 time to refer back to Exhibit 13. I will also be  
13 making reference to the photograph numbers that  
14 were attached to those photographs at the time of  
15 the 1966 inventory. And if you have any questions  
16 during the course of or subsequent discussion,  
17 don't hesitate to ask.

18           MR. GUNN: I now have in the room Steve  
19 Tilley from the National Archives and Ramona  
20 Branch, who will be assisting us with this process.

21           Could you please first show to Dr. Boswell  
22 the left side of head and shoulders, which

1 corresponds to black and white photo Nos. 1, 2, 3,  
2 and 4, and color Nos. 29, 30, and 31?

3 BY MR. GUNN:

4 Q My first question to you, Dr. Boswell, is  
5 whether you have previously seen the photographs  
6 that are in this first view of the left side of  
7 head and shoulders.

8 A Yes, I have.

9 Q Do those appear to you to be true and  
10 authentic photographs taken at the autopsy of  
11 President Kennedy?

12 A Yes.

13 Q Do you notice any differences between the  
14 photographs as they appear now and your  
15 recollection of the appearance of President Kennedy  
16 from the left profile?

17 A No.

18 Q Could you tell me whether you can see on  
19 the pictures of the left profile of President  
20 Kennedy any lacerations in the scalp?

21 A No.

22 Q Did you or Dr. Humes at any time make any

1 lacerations on the left profile of President  
2 Kennedy?

3 A No.

4 Q Approximately when during the course of  
5 the autopsy were these photographs taken? And by  
6 that I mean beginning, middle, end.

7 A This is the beginning, very beginning.  
8 These were initial photographs.

9 Q I asked you a variation of this question  
10 before, but as you look at these photographs now,  
11 can you tell whether there were any changes made to  
12 the appearance of President Kennedy such as the  
13 washing of the hair or combing of the hair?

14 A These are exactly as the body arrived to  
15 us. There's blood clotted in here, around the neck  
16 wound, some in the hair, not much. We didn't do  
17 anything to this.

18 MR. GUNN: Okay. Could Dr. Boswell now be  
19 shown the second view, which from the 1966  
20 inventory is described as the "right side of head  
21 and right shoulder," corresponding to black and  
22 white Nos. 5 and 6, and color Nos. 26, 27, and 28?

1                   BY MR. GUNN:

2                   Q     Dr. Boswell, do you recognize photographs  
3     that I have just described as the "right side of  
4     head and right shoulder"?

5                   A     Yes.

6                   Q     To the best of your recollection, are  
7     those true and accurate representations of  
8     photographs taken at the autopsy of President  
9     Kennedy?

10                  A     Yes.

11                  Q     Could you please describe in general terms  
12    what you observe in terms of wounds in the scalp  
13    first of President Kennedy?

14                  A     Well, the scalp is actually avulsed, and  
15    this is a huge laceration. The one that I was  
16    talking about in earlier questions.

17                  Q     If I could just state for the record, it  
18    appears that you're talking about a laceration that  
19    is roughly slightly above the ear, that is, towards  
20    the vertex, and that the laceration appears to go  
21    slightly into the forehead above the right eye?  
22    Would that be fair?

1           A     Yes.

2           Q     Okay.

3           A     This actually shows almost the magnitude  
4 of my drawing on the skull the defect here.

5           Q     You're pointing to the uppermost portion  
6 of President Kennedy's head; is that correct?

7           A     Yes. Now, what you see at the very top  
8 left of the photograph is scalp. This can be  
9 folded back down and actually--well, almost  
10 completely hide the defect.

11          Q     Would it be fair to say that the portion  
12 of the head that we're seeing that looks disrupted  
13 in the portion of the photograph is largely the  
14 inside of the scalp--

15          A     Exactly.

16          Q     --all pulled back--

17          A     Yes.

18          Q     --and if that were pulled forward, that it  
19 would cover the defect?

20          A     Yes.

21          Q     And are you able to view in that  
22 photograph any brain tissue?

1           A     Probably a little bit right here on the  
2 right side, just above the fragmented bone, between  
3 that and the scalp. There's probably a little bit  
4 of brain there.

5           Q     But you would say just a very small amount  
6 within the photograph, that principally we are  
7 looking at the inside of the scalp?

8           A     Right. And this is a bone fragment that's  
9 adhered to the underside of the scalp but belongs  
10 up here.

11          Q     When you say the bone fragment, you're  
12 referring to the triangular-shaped object right  
13 immediately above the ear?

14          A     Yes.

15          Q     Above the right ear. And did I understand  
16 you correctly that that is a fragment that has come  
17 from another portion of the head?

18          A     Right.

19          Q     And so how would it be that that skull  
20 fragment is in that location?

21          A     Well, I think it's probably attached to  
22 the scalp that's reflected.

1       Q     So almost as if the scalp is hinged and a  
2 piece of the skull is attached to the scalp?

3       A     Yes. I think the color photograph shows  
4 it better. I don't think the black and white shows  
5 anything that the color photograph doesn't show.

6       Q     This is going to be a little bit difficult  
7 to describe, but you have identified a laceration  
8 that goes onto the forehead. I'd like you to go  
9 back from there about an inch-and-a-half and notice  
10 a portion of it where the top three parts of it  
11 seem to be almost rectangular in shape. Do you see  
12 that?

13      A     Yes.

14      Q     Can you tell me what that object is there?

15      A     Okay. This is skull, the white area is  
16 skull, and then the skull is fractured, and the  
17 bone beyond and above that, behind the hair here,  
18 is missing.

19      Q     Okay. And right to the right of the  
20 portion that I have described as being rectangular-  
21 -and when I say to the right, we should say that  
22 the head from the direction that we're looking at

1       is at the top of the document--there is something  
2       like a V-shaped indentation there. Do you see  
3       that?

4           A     Yes.

5           Q     That is coming closer towards the frontal  
6       bone. What do you perceive that V-shaped mark to  
7       be?

8           A     Well, the bone is fractured in a straight  
9       line here, and then this is another fracture  
10      margin. And this may come all the way across here,  
11      probably does.

12          Q     All the way across almost the coronal  
13      suture?

14          A     Yes. This is probably frontal bone, and  
15      then this is parietal bone extending up to here.

16          Q     Can you identify any difference between  
17      this photograph and how President Kennedy's body  
18      appeared from the right profile when you first saw  
19      him at Bethesda?

20          A     No. It looks the same.

T3B 21          Q     Was this photograph or were these  
22      photographs, which we're describing as View 2 or

1 the second view, taken reasonably near the  
2 beginning of the autopsy?

3 A Yes.

4 Q Could we turn to the third view, please,  
5 which is described in the 1966 inventory as the  
6 "superior view of the head"?

7 They correspond to black and white photo  
8 Nos. 7, 8, 9, and 10, and color photos Nos. 32, 33,  
9 34, 35, 36, and 37.

10 Dr. Boswell, do you recognize those as  
11 being photographs that you previously designated as  
12 "superior view of the head"?

13 A Yes.

14 Q I'd like to ask you first whether they  
15 appear to you to be true and accurate photographs  
16 of the autopsy of President Kennedy.

17 A Yes.

18 Q Do you see any material difference between  
19 the photographs as they appear now and President  
20 Kennedy as he was photographed on November 22nd?

21 A No.

22 Q I'm going to ask you to look at

1 approximately the midline of the brain. There  
2 appears to be a straight line or a straight-ish  
3 line that goes--it appears to me to be slightly  
4 left of the midline of the brain that goes through  
5 the scalp. Do you see that line that I'm referring  
6 to?

7 A Yes.

8 Q Could you tell me what that line is, as  
9 best you understand?

10 A Well, that's a laceration margin of--you  
11 can see hair, skin, and subcutaneous tissue, and  
12 then a little soft membranous tissue attached with  
13 some blood coagulation on the under surface of the  
14 scalp.

15 Q In the photograph, as I mentioned, it  
16 appears as if that laceration is somewhat to the  
17 left of the midline. If the scalp were put back in  
18 place, where would you estimate that that scalp  
19 would come on the head?

20 A I think it would fall over here.

21 Q You're pointing over to the right side?

22 A To the right side of the body.

1       Q     So that the laceration that we see there  
2 would not have, in fact, been near the midline but  
3 would have come much farther over onto the right  
4 hemisphere?

5       A     Yes.

6       Q     In that photograph that you're looking at  
7 now--again, we're talking about the third view--do  
8 you see any material that is readily identifiable  
9 as brain tissue?

10      A     I don't think so.

11      Q     Would it be fair to say that what we are  
12 seeing there in terms of the open wound is  
13 principally the interior of the scalp?

14      A     Yes.

15      Q     Previously in the deposition, I asked you  
16 whether you recalled having seen any brain tissue  
17 extruding from the wound at the time that President  
18 Kennedy first arrived. Does this photograph help  
19 you answer the question about whether there was any  
20 brain tissue extruding from the wound?

21      A     Yes. I see none. I can't be sure that  
22 some of this material isn't cerebral cortex

1 fragmented, but I think most of it is just blood  
2 within the fascia of the scalp.

3 Q I'd like to point out another straight  
4 line. Maybe if we can put the nose going up, there  
5 is the line that I mentioned before that appears to  
6 be left of the midline, the laceration in the  
7 scalp. There appears to be another line of some  
8 sort right in the center of the midline. It's not  
9 as clear as the other line. Can you see the  
10 portion I'm referring to?

11 A I see it, yes.

12 Q Can you tell me what that is, as best you  
13 understand?

14 A I think that's just the way the tissue is  
15 torn. The way that the bullet came in through here  
16 and exploded against the top of the skull just  
17 shattered everything, and I think these are  
18 stretched tear marks, like this was, and this was  
19 strong enough to completely separate the tissue.  
20 This is a similar one that just didn't completely  
21 separate it. There are others over here, too.

22 Q Could that be the superior parasagittal

1       sinus?

2           A     No. That is attached to the under surface  
3       of the skull.

4           Q     So it couldn't be that? Could that be any  
5       sort of line or space between the right and left  
6       cerebral hemispheres?

7           A     I don't think so, because from all the  
8       other documentation, I know that that fracture line  
9       was like this, and this is going to fold over also  
10      toward the right side of the body. And I don't  
11      think that these are really midline objects. I  
12      think that they're going in this direction, toward  
13      the right.

14           Q     Could we turn next to the fourth view,  
15       which is described in the 1966 inventory as the  
16       "posterior view of wound of entrance of missile  
17       high in shoulder"? That corresponds to black and  
18       white Nos. 11 and 12, and color Nos. 38 and 39.

19           Dr. Boswell, do those photographs appear  
20      to you to be original and authentic photographs  
21      taken at the autopsy of President Kennedy?

22           A     Yes.

1           Q     Do you notice in those photographs any  
2 variation that differs in any material way from  
3 what you observed on the night of the autopsy?

4           A     No.

5           Q     Can you tell me approximately when during  
6 the course of the autopsy that those photographs  
7 were taken?

8           A     Very early.

9           Q     I'd like to ask you a question first about  
10 the scalp, although that's not the center of the  
11 photograph, and ask you whether the scalp had been  
12 pulled up in any way in order to keep any flaps  
13 from hanging down over the back. I don't know if  
14 that question was--

15          A     Yes, I understand.

16          Q     Maybe if we could look at that photograph  
17 in conjunction with one from the third view.

18          A     Where the flap is coming down?

19          Q     Yes.

20          A     I know this--the flap is stretched forward  
21 here, because if this fell back down--with him in  
22 this sort of recumbent position, yes, this scalp

1 would fold down and cover this wound.

2 Q So you're saying that on the fourth view,  
3 which are the photographs that are in your hand  
4 right now, the scalp has been pulled back and  
5 folded back over the top of the head in a way  
6 different from the way that they appeared in the  
7 third view, the superior view of the head?

8 A Yes.

9 Q Is that fair?

10 A In the previous one, it was permitted just  
11 to drop. In this one, it's pulled forward up over  
12 the forehead, toward the forehead.

13 Q Who, if you recall, pulled up the scalp  
14 for the photograph to be taken?

15 A There are about three of us involved here,  
16 because there are two right hands on that  
17 centimeter scale. I think that I probably was  
18 pulling the scalp up.

19 Q I'd like you to notice in that photograph-  
20 -and, again, we're still talking about the fourth  
21 view--that there is a little white marking--I don't  
22 know what it is--that is very near the hairline.

1           A     Here?

2           Q     Yes.  Do you see that either matter of  
3 tissue or something--

4           A     I have seen that and worried and wondered  
5 about it for all these many years.  Some people--  
6 many people have alleged that to be the wound.  I  
7 don't think it is.

8           Q     In relationship to that white marking,  
9 whatever it is, could you say or describe  
10 approximately where the entrance wound was, where  
11 the entrance wound would be in relationship to  
12 that?

13          A     Well, I think that the entrance wound is  
14 up in here someplace.  I'm talking like a couple of  
15 centimeters above the hairline and 4 centimeters to  
16 the left of the ear.  But I can't argue with that.  
17 I don't know what that is.  I've seen this in other  
18 photographs.  In some areas, it's a little  
19 translucent bubble.  I think that the wound of  
20 entrance is up in here.

21          Q     Okay.  What I'd like to ask you to do is  
22 measure with the centimeter measure here.  Maybe if

1 we can--

2 A You can't--well, okay. Let's see. This  
3 is--

4 Q You don't need to try and get it to  
5 correspond to the ruler in the photograph.

6 A Well, this is about two to one, so--

7 Q Just if you can do it on the actual  
8 measurement.

9 A You want me to measure this?

10 Q Measure it from--approximately the  
11 distance from that white spot that is on the--

12 A Where I think the wound of entrance is?

13 Q Yes, that's right, what the distance is.

14 A Okay. I think this is...about 3.5  
15 centimeters with this scale.

16 Q Okay. So if President Kennedy were  
17 standing erect, then--and we're talking about the  
18 measurements corresponding to the photograph and  
19 not to real life. But from what I was  
20 understanding, you were saying that the measurement  
21 would be approximately 3.5 centimeters at  
22 approximately a 45-degree angle from that white

1 spot, that is, if President Kennedy were standing  
2 erect? Is that fair?

3 A Yes.

4 Q And it's in the direction towards the  
5 right ear?

6 A Toward the ear. That's maybe like 30  
7 degrees.

8 Q And the point that you are estimating that  
9 the entrance wound was located, is that the  
10 location that was previously recorded as  
11 approximately 2.5 centimeters to the right and  
12 slightly above the external occipital--

13 A Right.

14 Q Okay. Now, if we could go to the other  
15 wounds there, could you identify where the entrance  
16 wound was in the body of President Kennedy, outside  
17 of the scalp now? Does that wound that you're  
18 pointing to correspond to the larger wound that is  
19 to the right of the ruler in the photograph?

20 Again, assuming President Kennedy were standing  
21 erect.

22 A Yes.

1           Q     So it's the wound that comes closer to  
2 being towards the tip of the ruler towards the  
3 neck?

4           A     No, this is blood clot down here. This is  
5 not wound.

6           Q     You're referring to a second marking that  
7 is somewhat below--

8           A     Right.

9           Q     --the larger marking. Was the ruler  
10 covering, the ruler in the photograph covering any  
11 other wound on the back--

12          A     No.

13          Q     --that you're aware of?

14          A     It's just about over the vertebral bodies,  
15 the midline. There's nothing underneath it.

16          Q     I'd like to go back to one of the Rydberg  
17 drawings that we had looked at earlier--and this is  
18 from Exhibit MI 13--and ask you whether in looking  
19 at the photograph you think that the wound, that  
20 is, the entry wound in the body of President  
21 Kennedy, corresponds more closely to the Rydberg  
22 photograph or to the drawing that appears in

1      Exhibit 1, the drawing that you made at the time of  
2      the autopsy.

3      A      It's sort of in between. There's a lot of  
4      skin here above the wound of entry on the back up  
5      to where you can see the folds of the base of his  
6      neck. But his acromial process is out here and I--

7      Q      Out under the hand in the photograph?

8      A      Yes. And here's his clavicle. This is  
9      sort of in between these two.

10     Q      So it's in between the one marked Exhibit  
11    1 and Exhibit MI 13?

12     A      And the Rydberg drawing.

13     Q      If you had to match the entrance wound  
14    that you can see on the photograph in View 4 to one  
15    of the vertebra, would you be able to give an  
16    approximate location, either C7 or C4 or T3,  
17    whatever?

18     A      Well, it's certainly not as low as T4. I  
19    would say at the lowest it might be T2. I would  
20    say around T2.

21     Q      Can you identify an abrasion collar on the  
22    wound depicted in the fourth view?

1           A    I'm sorry. Now repeat that?

2           Q    Can you identify an abrasion collar on the  
3 wound in the photographs you're looking at now,  
4 View 4?

5           A    Are you talking about the one in the  
6 posterior?

7           Q    Yes.

8           A    Well, this looks like it's coagulated  
9 around here, and that, I guess, is what you would  
10 call an abrasion collar.

11          Q    Did you notice an abrasion collar on that  
12 posterior wound during the course of the autopsy?

13          A    Oh, yes.

14          Q    So is the question now whether it can be  
15 identified by the photograph?

16          A    This is a good wound of entrance. It's  
17 indented, almost round. I think that the  
18 photograph is very good for identifying that as a  
19 wound of entrance.

20          Q    Okay. But in terms of identifying an  
21 abrasion collar, does it--

22          A    Oh, I think that's very good. I can't

1 imagine a true forensic pathologist disagreeing  
2 with that.

3 Q I'd like to go to the fifth view, if we  
4 could, which is described in the 1966 inventory as  
5 the "right anterior view of head and upper torso,  
6 including tracheotomy wound." That corresponds to  
7 black and white Nos. 13 and 14 and color Nos. 40  
8 and 41. The first question for you, Dr. Boswell,  
9 will be whether these photographs appear to be  
10 accurate photos of the autopsy of President  
11 Kennedy.

12 A Yes.

13 Q Let me ask you first whether the wound in  
14 the neck that you see from the front is as the neck  
15 wound appeared when you first saw it at the  
16 autopsy.

17 A Yes.

18 Q In your experience, is that wound a  
19 typical tracheotomy incision?

20 A It's pretty big. I'm not sure what  
21 "typical" would be, but it's a big tracheos--but  
22 I've seen many tracheostomy wounds that big. So

1 it's not too unusual, especially when you're doing  
2 it in a terminal, why, you don't worry about the  
3 size of the wound.

4 Q I'm sorry. When you're doing--

5 A When you're doing it in a terminal  
6 patient, why, the last thing you're going to worry  
7 about is the size of the tracheostomy wound.

8 Q I notice that this photo is different from  
9 the first view that we took a look at. The eye, at  
10 least on the right side, appears to be open.

11 Actually, both eyes appear to be open. Do you  
12 recall whether the eyes were open during the course  
13 of the autopsy?

14 A I don't recall that that was a point of  
15 interest. I think we just moved back and let the  
16 photographer take the picture, and I think maybe  
17 positioning the body may have had something to do  
18 with stretching the eyelids. But I don't think we  
19 made any attempt to take the pictures with the eyes  
20 open or closed.

21 Q So the difference on whether the eyes were  
22 open or closed would not be of any material

1 significance in terms of the timing of the  
2 photographs?

3 A No.

4 Q I'd like you to note the semi-triangular-  
5 shaped marking that goes into the forehead. Does  
6 that correspond to the laceration that we  
7 previously noted in the second view?

8 A Yes.

9 Q I'd like to show you Exhibit No. 74, the  
10 plastic skull, and the line that is marked 2, that  
11 comes towards the front. Is it your understanding  
12 that the laceration that is there corresponds  
13 roughly to the line that is marked No. 2 on the  
14 skull?

15 A Yes, and I seem to remember this extending  
16 down into the rim of the eye more, which it  
17 obviously doesn't from these photographs. And  
18 that's why I had drawn this down here.

19 Q Okay. So the marking that's on the skull  
20 on Line 2 probably extends further down towards the  
21 eye than would be reflected in the photographs; is  
22 that correct?

1       A     Well, I don't know whether later in the  
2 autopsy we stretched this so that this laceration  
3 extended down there. At some point, it seemed to  
4 me that it did. But this obviously is the way that  
5 it was when he came in.

6       Q     Okay. Could we turn to the sixth view,  
7 which is described as "wound of entrance in right  
8 posterior occipital region"? That corresponds to  
9 black and white photos Nos. 15 and 16, and color  
10 photos Nos. 42 and 43. Do these photographs appear  
11 to you, Dr. Boswell, to be accurate representations  
12 of photographs taken during the autopsy of  
13 President Kennedy?

14      A     Yes.

15      Q     In that photograph, is the scalp of  
16 President Kennedy being pulled forward?

17      A     Yes.

18      Q     For what purpose was it being pulled  
19 forward?

20      A     In order to take the photograph, because  
21 if it wasn't pulled forward, this would just--the  
22 scalp would come down and cover the wound of

1 entrance here. And this was necessary to  
2 demonstrate the wound here.

3 Q Okay. Now, as you're looking at the  
4 photograph of President Kennedy, if you're looking  
5 at it as if President Kennedy were standing erect--  
6 of course, he's lying on his side, but we'll look  
7 at it from the perspective of the ruler being  
8 vertical, pointing upwards, and the head pointing  
9 upwards. Could you identify where on the  
10 photograph the wound of entrance was located,  
11 please--the wound of entrance in the skull?

12 A This is the one that I have--photograph  
13 that I have had a dilemma about for so many years.  
14 This is the white spot that you showed me in the  
15 other photograph.

16 Q Yes, down near the hairline.

17 A Yeah. And that is not where I thought  
18 that the wound of entrance was.

19 This must be the wound of entrance.

20 Q You're pointing down to the white marking  
21 near the hairline?

22 A Yeah. I'm trying to find anything up in

1 here, and obviously the photographer was taking  
2 this in such a manner to show that. I can't find  
3 anything else. This is in disagreement with this,  
4 obviously.

5 Q When you say it's in disagreement, you're  
6 referring to Exhibit MI 13--

7 A Yes.

8 Q --the Rydberg drawing?

9 A Right. Because this is more in the  
10 midline and lower.

11 Q I'd like to draw your attention to in the  
12 color photograph the round, reddish marking just to  
13 the right of the ruler, very near the top of the  
14 ruler.

15 A Yes.

16 Q Could that round or ovular-shaped marking  
17 be the entrance wound?

18 A No.

19 Q What is that, if anything, that round or  
20 ovular-shaped marking?

21 A I think it's the--this is awfully near the  
22 front of the scalp fragment here, and here is a

1 laceration up here with complete separation. And  
2 when--

3 Q You're referring there to the very top of  
4 the scalp--

5 A Just under the fingers that's holding the  
6 scalp up. And if you let--when you let this fall  
7 down, in one of the previous photographs--

8 Q I'm sorry. Just for the record, you're  
9 letting the scalp fall down towards the back and  
10 cover where the ruler would be?

11 A Yes. If you let that fall down, then this  
12 would be right in the midline and that line that  
13 you asked me about where the tissue was separated  
14 but not completely separated. And I think this is  
15 probably the other side of that traumatic  
16 disfigurement of the scalp.

17 Q If I understood you correctly, were you  
18 saying that that marking that we've been pointing  
19 to that is near the top of the ruler and somewhat  
20 to the right might be the beginning or at least  
21 part of the laceration in the scalp?

22 A Yes. That's occurring from beneath with

1 the explosion of the bullet.

2 Q I'd like you to note the parting of the  
3 hair that goes at approximately a 45-degree angle  
4 irregularly out to the right. Is that hair that is  
5 being pulled to the left covering part of the  
6 laceration?

7 A Probably. I can see it; probably up in  
8 here, at least.

9 Q Is there any question in your mind about  
10 whether that photograph may have been changed or  
11 altered in any way?

12 A Oh, I don't know how they would--how  
13 anybody could have done that. I mean, all the  
14 other things I see here, my hairy arm, everything  
15 else looks normal.

16 Q Holding aside the question of how someone  
17 might have done that, is there anything in that  
18 photograph that appears to be different from how  
19 you remember seeing it on the night of the autopsy?

20 A No, and I've seen it many times since.  
21 I've seen this photograph many times since then,  
22 and it's--I think this was the photograph that was

1 taken there. It's just that my memory of this  
2 apparent lesion--

3 Q Down at the bottom towards the hairline?

4 A --was in a different location. But  
5 everything else fits.

6 Q In looking at that photograph, do you have  
7 any reason to re-evaluate the location of the wound  
8 of entrance in the skull from being 2.5 centimeters  
9 to the right and slightly above the right occipital  
10 protuberance?

11 A Well, these figures are more important to  
12 me than this, because I--this I'm not sure of.  
13 These I am sure of.

14 Q When you say "these figures," you're  
15 referring to the autopsy face sheet, Exhibit 1?

16 A The measurements on the face sheet.

17 Is there another photograph showing the  
18 head wound of entry?

19 Q The next photograph, we'll look at it in  
20 just a minute. Now I'd like to ask you a question  
21 about what is underneath the scalp of what we are  
22 looking at now. Let's take the marking that

1 appears towards the hairline right at the base of  
2 the neck, or where the hairline meets the neck. If  
3 we take the point above that, where would you say  
4 that the scalp is or that the skull will be missing  
5 underneath the scalp that we can view there?

6 A Probably right about here.

7 Q So you're--

8 A Just about the base of the ear.

9 Q So you're pointing to approximately  
10 halfway up the ruler that we can observe and to the  
11 right of that small fragment, so the skull is  
12 missing--

13 A Right.

14 Q --underneath there.

15 A Yes. The reason I asked about another  
16 picture, because it seems to me I remember one  
17 picture that shows the tunneling very well. And  
18 I'm not sure whether that one shows the position of  
19 the entry wound any better, but it does show the  
20 one-and-a-half centimeter tunnel.

21 Q Just to try a different description,  
22 because we're trying to put this into words where

1 we're looking at photographs, would it be fair to  
2 say--again, we are imagining President Kennedy is  
3 standing erect, although he's lying down in this  
4 photograph. So with the ruler pointing up, would  
5 the portion as it would appear on this photograph  
6 to the left of his right ear all be the portion of  
7 the skull that was missing?

8 A Yes.

9 Q Okay. Could we look at View No. 7,  
10 please, which was described in the 1966 inventory  
11 as a "missile wound of entrance in posterior skull,"  
12 following reflection of scalp," corresponding to  
13 black and white photos Nos. 17 and 18, and color  
14 photographs 44 and 45?

15 I'd just say, too, Dr. Boswell, this  
16 concludes the end of the views that we have of the  
17 skull.

18 [Pause.]

19 THE WITNESS: I'm sorry. I cannot orient  
20 this at all.

21 BY MR. GUNN:

22 Q Everyone who looks at these photographs

1 has a hard time orienting it. Can you tell whether  
2 that is the posterior portion of the cranium or  
3 frontal or parietal? Any idea at all?

4 A I'm afraid I can't.

5 May I see the last one that we did?

6 Q That would be the sixth view, correspond-  
7 ing to photos black and white 15 and 16, and color  
8 Nos.--

9 A Just the color.

10 Q --42 and 43.

11 A No. The one before this.

12 Q Photographs 13 and 14 black and white, and  
13 color 40 and 41. Oh, the next one? 11 and 12, 38  
14 and 39.

15 [Pause.]

16 MR. GUNN: Okay. Dr. Boswell is now  
17 looking at the third view in conjunction with the  
18 seventh view, the third view being the superior  
19 view of head.

20 [Pause.]

21 THE WITNESS: I think it would be foolish  
22 to do anything with this.

1           I think that this is anterior, because  
2 this is not the under surface of the scalp that we  
3 saw before. I think the scalp is probably back  
4 down here. But what we were attempting to show in  
5 here, I don't know.

6           BY MR. GUNN:

7           Q    Would it be fair to say that what you are  
8 suggesting now is that the hole that appears in the  
9 cranium is towards the frontal part of the cranium?

10          A    I can't be sure.

11          Q    Let me show you two different descriptions  
12 that have been made in two documents. The first  
13 one that we've been referring to is Exhibit 13,  
14 which is the 1966 inventory. That refers to the  
15 photograph as being "missile wound of entrance in  
16 posterior skull, following reflection of scalp."  
17 So that is how that is described in November of  
18 1966.

19           But then in another document dated in  
20 handwriting--and I don't know whether that date is  
21 accurate--January 26, 1967, but also signed  
22 apparently on January 26, 1967, by yourself and Dr.

1       Humes, that photograph is described not as a  
2 posterior wound but as the exit--not as the  
3 posterior entrance wound but as an exit wound.  
4       Photograph Nos. 17, 18, 44, and 45 show the other  
5 half of the margin of the exit wound and also show  
6 the beveling of the bone characteristic of a wound  
7 of exit.

8           A     Well, I see that, but I...I can't identify  
9 anything else in here to tell where we are. This  
10 is a different appearance of scalp, but there are  
11 other things in here that I can't identify. This  
12 looks like part of the chest flap that's down here.  
13 The hair and the bone--this is skull, I'm sure of  
14 that.

15          Q     You're pointing to the jagged piece very  
16 near the center of the photograph.

17          A     Right here.

18          Q     I'll ask that you draw an X to the side,  
19 so the corners of the photograph will be in the  
20 center. That is skull, you say; is that correct?

21          A     Yes. And this looks like a beveled round  
22 area here of skull bone.

1           Q     That's the notch right near the center of  
2 the photograph.

3           A     Right in the center. And the hair helps  
4 identify it, but, otherwise, I cannot tell.  
5 There's too many bone fragments around, and I see  
6 no brain at all.

7           Q     Dr. Boswell, could you tell me who drafted  
8 the language that was used in Exhibit No. 13, the  
9 1966 inventory?

10          A     I think we all worked on this, and  
11 obviously a long time. Let's see. Who was there?

12          Well, it must have been Jim and I. John  
13 Stringer wouldn't have anything to do with this,  
14 and I doubt if John Ebersole would. So we had to  
15 be responsible for this.

16          Q     Was there anyone from the Justice  
17 Department who participated in this inventory in  
18 1966?

19          A     Well, the only person I can think of would  
20 be Carl Eardley.

21          Q     Now, there was a subsequent inventory  
22 which the Justice Department likely participated

1       in, which I'll show you. But do you remember  
2 whether there was anyone involved in the earlier--

3       A     Yeah. Carl Eardley, I think he went with  
4 us on almost all the occasions.

5       Q     Do you know why Mr. Eardley went with you,  
6 what his role was?

7       A     No. I don't have any idea. But  
8 everything we did, he was with us. He was an  
9 awfully nice man.

T4A 10           But he would not have had anything to do  
11 with the descriptions, obviously, nor Dr. Rhoads.  
12 He spent a lot of time with us when we were doing  
13 this also, but he--I think Jim and I probably were  
14 responsible. And even then, we had trouble with  
15 this, and the one with the little teardrop on it we  
16 had trouble with.

17       Q     That's view--

18       A     And everybody else who saw those did.

19       Q     When you refer to the teardrop, you're  
20 referring to the fifth view described as the "wound  
21 of entrance in right posterior occipital region."

22       A     Right, yes.

1 Q View 6, yes.

2 On page 5 of Exhibit No. 13 for photograph  
3 No. 17, which is what we are looking at here, it  
4 says that there is a missile--or that it's  
5 depicting a missile wound of entrance. Do you see  
6 where that wound of entrance would be or what you  
7 were referring to, at least--

8 A It couldn't be.

9 Q --as of 1966?

10 A Couldn't be.

11 Q Couldn't be?

12 A No.

13 Q In View 7.

14 A No. The only--well, I know the dilemma we  
15 were in. This is what appears to be calvarium, a  
16 piece of bone plate, skull plate.

17 Q And you're referring to the bone that's in  
18 the center of the photograph in View 7?

19 A Right. A fairly sizable white piece of  
20 bone. And if you look at this beveling of the bone  
21 here, this would be a wound of exit, because the  
22 skull bevels outward on the outer surface.

1           Q     So that the dimensions of the wound on the  
2 interior of the cranium are less than the  
3 dimensions would be on the exterior of the cranium?

4           A     Yeah, and it--the bullet would have to be  
5 coming from over here through.

6           Q     From the inside out?

7           A     Yeah.

8           Q     Which would mean--

9           A     And that would make this a wound of exit,  
10 which is described there. But there's no way this  
11 could be called a wound of entrance, and there's no  
12 other--now, the only other thing is that if--on the  
13 reflected scalp here, there is a wound or  
14 something. I can't see that. I see a paper clip  
15 pulling that back that way. It's such a dilemma,  
16 and I think anybody that tries to conjecture that  
17 film...

18           Q     Would it be your best estimate right now  
19 that the description of that photograph from 1966  
20 under entry No. 17 on page 5 would be inaccurate?

21           A     Inaccurate, and I'm not sure about that  
22 one either.

1 Q Okay.

2 A In '67.

3 Q When you say the other one, you're  
4 referring to Exhibit 14?

5 A Right.

6 Q Could you tell me who drafted the document  
7 that is Exhibit 14?

8 A This is Jim's language, I think.

9 Q To me as a lay person, it appears as if in  
10 November of 1966, View 7 is being described as an  
11 entrance wound, and in January of 1967, two months  
12 later, it's being described as an exit wound.

13 First, do you have any reason for thinking that my  
14 understanding is inaccurate? Is there a switch in  
15 how those two photographs are described?

16 A Yes, I agree, and I have no explanation  
17 for that. I think they were both wrong, and I  
18 think the reason is that it's just such a terrible  
19 photograph.

20 Q Do you recall engaging in any discussions  
21 with anybody about how that photograph should be  
22 described that would have led to a change between

1 November of 1966 and January of 1967?

2 A No. I don't remember that Pierre came  
3 over for that, but I see he and Jim and I were the  
4 ones who--on the second occasion. Well, now, that  
5 might be the answer right there. See, Pierre was a  
6 forensic pathologist. He was trained as a forensic  
7 pathologist, and he was extremely able relative to  
8 ballistics. And he may have talked us into this.  
9 That's the only thing I can think of. Whether  
10 he'll remember that or not, I don't know.

11 Q Do you remember Mr. Eardley participating  
12 in any discussions over this issue?

13 A He did nothing more than greet and say  
14 hello to us on occasions like that. He didn't even  
15 stick around.

16 Q We're about to look at some photographs  
17 that show just the brain. Putting those  
18 photographs aside, are there any other photographs  
19 that you remember having been taken during the time  
20 of the autopsy that you don't see here?

21 A The only one that I have a faint memory of  
22 was the anterior of the right thorax. I don't see

1 it, and haven't when we tried to find it on  
2 previous occasions, because that was very important  
3 because it did show the extra-pleural blood clot  
4 and was very important to our positioning that  
5 wound.

6 Q There are additional descriptions of  
7 photographs showing--described as showing the  
8 entrance wound in the skull from both the exterior  
9 and the interior with the scalp reflected. Do you  
10 remember any photographs with the scalp reflected  
11 showing the wound of entrance in the skull?

12 A Well, I seem to remember a couple of  
13 photographs. That might be one, and particularly  
14 one showing the beveling of that same wound--or not  
15 beveling, but the tunneling. But I can't imagine  
16 that there are any photographs missing. Numerical-  
17 wise, are they all here?

18 Q Not that I'm aware of any photos that are  
19 missing since the 1966 inventory. The question  
20 would be whether there were other photographs taken  
21 that were not in the 1966--

22 A Yeah, well, we've always looked for the

1 one of the chest cavity, and then I seem to  
2 remember photographs, color photographs of the  
3 tunneling.

4 Q Do you remember seeing the photographs  
5 themselves or do you remember taking the  
6 photographs?

7 A I've never seen the one of inside of the  
8 chest. The one of the skull wound, I thought I  
9 remembered seeing it, but I--now, I've seen an  
10 awful lot of pictures like in Livingstone's books.  
11 Where those came from, I don't know. And whether  
12 they're fabricated, some of them, or not--and I may  
13 be confusing pictures I've seen that are alleged to  
14 be autopsy photographs.

15 Q Let me show you Exhibit No. 14. The  
16 paragraph at the bottom on page...

17 A Yes, now where is that?

18 Q The photographs that are referred--for the  
19 record, the portion of the document that we're  
20 looking at says, "The scalp wound shown in the  
21 photographs appears to be a laceration and tunnel,  
22 with the actual penetration of the skin obscured by

1 the top of the tunnel." That's referring to View  
2 No. 6, photographs Nos. 15, 16, 42, and 43, if we  
3 could see one of those.

4 A That's the same one.

5 MR. GUNN: Dr. Boswell is now looking at  
6 the sixth view.

7 THE WITNESS: I guess maybe that's the one  
8 I remember. It looks different to me today as I  
9 see this. I don't appreciate the tunnel as much as  
10 I have in past examinations, and the position is  
11 different.

12 You see, the problem is, though, that this  
13 scalp is all loose, and this might not be the--as  
14 we're viewing this, this might not be the position  
15 of this wound.

16 BY MR. GUNN:

17 Q Again, you're referring to the mark down  
18 near the hairline--

19 A Right, on--

20 Q --on View 6?

21 A Photograph 42. This scalp may fit  
22 differently, and this might easily be closer to the

1 underlying bony wound of entrance.

2           When I look at this again, it sounds very  
3 much like we've described it here.

4           Q     Okay. In other words, this photograph of  
5 View 6 corresponds with the language used in  
6 Exhibit No. 14 on the bottom of page 3?

7           A     Exactly.

8           Q     Could we turn to View 8, which is "basilar  
9 view of brain"? View 8 corresponds with black and  
10 white photo Nos. 19, 21, 22, and color photo Nos.  
11 46, 47, 48, 49.

12           Dr. Boswell, were you present when the  
13 photographs in View 8 were taken?

14           A     Yes.

15           Q     And approximately when, to the best of  
16 your recollection, were the photographs taken? Let  
17 me try it a different way. Were the photographs  
18 taken at the supplementary examination of the  
19 President's brain?

20           A     Yes, within less than a week following the  
21 autopsy, after formalin fixation.

22           Q     Do the photographs correspond to your

1      recollection of damage to the brain as depicted  
2      from the basilar view?

3      A      Yes.

4      Q      Could you tell me whether any portion of  
5      the right or left hemisphere of the cerebellum is  
6      disrupted from the photographs?

7      A      Quite a bit. You said cerebellum?

8      Q      Yes.

9      A      Oh, I'm sorry. I was thinking of  
10     cerebrum. The cerebellum is a little bit disturbed  
11     here, but I'm not sure that that is due to this  
12     trauma. Most of the trauma I see is to the right  
13     lobe, and most of that is to the superior portion,  
14     which this doesn't show because this is upside  
15     down.

16     Q      By upside down, you mean it's just a view  
17     from the bottom?

18     A      Right.

19     Q      From that photograph, the way that it  
20     appears in the photograph, is the left hemisphere  
21     of the cerebellum disrupted?

22     A      A little bit. Certainly the midline is

1 torn. See, the falx comes down between these two  
2 and then is connected to the skull above, and  
3 that's been torn away, and all this has been  
4 disrupted, the connections between the two lobes.  
5 And there's hemorrhage, fragmentation, a lot of  
6 fragmentation of the right lobe. The only part of  
7 the right lobe that's intact are these two areas  
8 right here, like this.

9 Q Now, did the bullet wound--if we're  
10 thinking of President Kennedy standing erect or  
11 sitting erect, did the bullet wound go from a lower  
12 part of the brain--again, we're talking back 2.5  
13 centimeters to the right of the EOP and then go in  
14 an upward direction out of the right temporal  
15 parietal area?

16 A Yeah, the bullet entered probably behind  
17 the cerebellar pons here, back in there, and then  
18 it was coming back up this way and I guess it  
19 probably would have come through the brain at some  
20 point, through the brain, but it's going to hit the  
21 calvarium up right at the top. And then that  
22 explosion is the thing that's going to sort of

1 disperse all the tissue here and bone and the scalp  
2 overlying. So it's coming from down here, up  
3 through.

4 Q From a lay perspective, it would seem to  
5 me, based upon what you've said, that the  
6 disruption in the cerebrum would be more towards  
7 the point of entrance and lower.

8 A I think it's probably going to be at the  
9 point of exit. I think when the bullet hits the  
10 calvarium above, that's when the explosion took  
11 place, because all the bone was just crushed at  
12 that point. And a lot of force is extended all the  
13 way throughout the calvarium--or throughout the  
14 cranial vault, and that's when a lot of this damage  
15 took place.

16 Q Was there any disruption to the mid-brain?

17 A Oh, it's totally demolished. This is mid-  
18 brain right here, and everything there is gone--  
19 well, not gone, but it's stretched--but I don't  
20 know what caused that, whether that was the bullet  
21 hitting something or whether it was the tugging on  
22 the falx. You see, the falx is intimately

1 associated with all the structures in the mid-  
2 brain, and between the two.

3 Q What I'm not understanding--and this, I'm  
4 sure, comes from my lack of medical training--is  
5 that it seems as if there is a laceration that goes  
6 through the mid-brain, which I would characterize  
7 as the lower part of the brain.

8 A Yes.

9 Q But there's also a laceration that goes  
10 near the vertex of the brain, which would strike me  
11 as being the upper. Also, it seems as if there is  
12 some suggestion that the portion between that upper  
13 and lower laceration is relatively more intact than  
14 the upper and lower portions. Is that correct or  
15 incorrect?

16 A I think you're right, but the forces  
17 causing this are multiple: the explosive force of  
18 the bullet hitting the calvarium, the upper  
19 surface; the explosion of the falx, because that  
20 all stretched at the same time, and it is pulling  
21 brain against bone, and then separating from both  
22 eventually. And so all that trauma is taking place

1 at the same time or in a very brief interval. But  
2 not much of this could be caused by bullet  
3 entering. Of course, fractures took place at two  
4 stages. A lot of fractures took place when the  
5 bullet entered the cranial vault, and then they  
6 really took place when the bullet went out.

7 Q Could any of the left cerebellum have been  
8 disrupted by either the entrance or the exit?

9 A Well, see, the dura encapsulates all the  
10 lobes of the brain, and they're all intimately  
11 attached. And when you start tugging on the dura  
12 in any one place, or especially in multiple places,  
13 is when the--that explosion really expanded the  
14 whole cranial vault. And those membranes are  
15 really being pulled and pushed in all directions,  
16 and they're going to do all kinds of--this kind of  
17 trauma.

18 Q So, in other words, even though the bullet  
19 would have entered near the right cerebellum, the  
20 right cerebellum could emerge intact, whereas the  
21 left cerebellum could be disrupted? Is that fair?

22 A Yeah.

1           Q     And looking at the photograph, is that  
2 what you would understand to have happened?

3           A     Yes. I think that the major traumatic  
4 event was the explosion of the bullet against the  
5 top, but the entry of the bullet into the posterior  
6 cranial vault, from that point on, varying degrees  
7 of trauma are taking place. And then it was all  
8 just catastrophe.

9           Q     Would it be your understanding that the  
10 bullet entering in the back of the skull entered at  
11 a point above the cerebellum?

12          A     No.

13           Yes, I guess you're right. Above the  
14 right lobe of the cerebellum, right. Do you have  
15 an anatomical diagram there?

16          Q     I'll show you a document marked Exhibit MD  
17 71, if that helps.

18          A     And let's see. If you have a skull--see,  
19 it's awful close to the cerebellum. But, see,  
20 these membranes that are coming down between the  
21 two cerebral cortices, they fold around and envelop  
22 the cerebellum as well. And they're all attached

1 to each other and to the bone. And when fractures  
2 start occurring in linear fashion all over the  
3 place, they're going to be pulling that. And so  
4 that alone is going to cause a lot of distortion or  
5 destruction of the cerebellum.

6 Q But if the entrance wound was near the  
7 right cerebellar hemisphere, wouldn't the  
8 disruption have been on the right cerebellum?

9 A Well, initially at impact. But by the  
10 time it impacts up here and stretches all the  
11 membranes, then it's going to be all over. And,  
12 actually, if there's injury, it's more to the left  
13 lobe, although I can't be sure of that. These are  
14 sort of leaves, and they--there may not be a lot of  
15 trauma here. This may just be distortion through  
16 the fixation and removal.

17 Q When you say "not a lot of trauma here,"  
18 you're referring to the right--to the left  
19 cerebellar hemisphere?

20 A Yes. But there certainly is a lot to the  
21 mid-brain, right above that where it connects to  
22 the mid-brain and to the cerebral cortex.

1       Q     Do you see in this basilar view of the  
2 brain any incisions, surgical incisions?

3       A     No.

4       Q     Should a surgical incision be evident for  
5 the removal of the brain?

6       A     No. The removal of the brain takes place  
7 by separating the spinal cord right here. That's  
8 the only thing that attaches the brain, other than  
9 the meninges. And we section that and just lift it  
10 out.

11           Now, this is the way we examine the brain,  
12 and had we sectioned it, we would lay it just like  
13 this and then start slicing it here. And I think  
14 from the microscopic description of the brain--we  
15 have microscopic sections of the transected cord.

16       Q     Exhibit 4.

17       A     Oh, and also we did take some sections of  
18 the right parietal lobe, corpus callosum, that was  
19 right in here someplace. Anterior portion, frontal  
20 lobe, frontal parietal cortex. So there are a lot  
21 of sections of brain.

22       Q     Could you look at F, from the right

1 cerebellar cortex?

2 A Mm-hmm.

3 Q Why would this section have been taken  
4 from the right cerebellar cortex?

5 A I suppose just to have normal tissue to  
6 compare with the other side.

7 Q Shouldn't there have been a section--  
8 shouldn't a section have been taken from the left  
9 cerebellar cortex as well, given the apparent  
10 disruption?

11 A Well, I'm not sure that this is real.  
12 This might not be real traumatic--in the fresh or  
13 fixed brain, we may have seen lesions over here  
14 rather than here, and there may not have been any  
15 lesions at all. We may have just taken a section  
16 for reference.

17 Q Previously, we noted that there was no  
18 fresh brain weight recorded on the face sheet in  
19 Exhibit 1. In the supplementary autopsy report,  
20 there is a weight for the brain. Do you see the  
21 weight that that gives there?

22 A Yes.

1           Q     Do you remember the brain being weighed in  
2 the supplementary?

3           A     I don't remember that, but I can't imagine  
4 that we would not weigh it.

5           Q     I'd like to turn back to Exhibit No. 7,  
6 which is the autopsy manual, where it has the  
7 standard weights for organs of the body. If you  
8 remember, we looked at Appendix 3 on page 72 where  
9 standard weights were given for several of the  
10 organs. Could you look and see what the standard  
11 weight is for the male brain?

12          A     Average is 1,400.

13          Q     And approximately what percentage of  
14 President Kennedy's brain had been destroyed or  
15 removed?

16          A     I don't think a third. Less than a third.

17          Q     A third of the right hemisphere or a third  
18 of the total?

19          A     A third of the total.

20          Q     That would mean that the brain--correct me  
21 if I'm wrong--the brain would have weighed, fully  
22 intact, approximately 2,000 grams. Would that be

1      correct?

2            A     No, because this is fixed now.

3            Q     Approximately how much weight does fixing  
4 add to the weight of the brain?

5            A     Theoretically, it shouldn't add any.

6 After a certain period of fixation, it should  
7 revert to its normal weight because the water that  
8 is taken into it would be equalized. So--

9            Q     Had the brain been fully fixed at the time  
10 the photographs were taken?

11          A     I doubt it. I don't know when these were  
12 taken. Fully fixed usually requires over a week,  
13 depending upon how you do it. Normally, in a  
14 normal autopsy, what we do is inject the brain. We  
15 tie the vessels off, circle of Willis, and then we  
16 inject formalin into it by drip. And we'd let that  
17 go on for a week. And a lot of fluid is absorbed  
18 into it, so it would gain quite a bit at that  
19 point. But then leaving it in the fluid, it would  
20 balance out. I can't tell you about the...

21          Q     Again, from a lay perspective, it seems as  
22 if the brain of President Kennedy, even after a

1 large portion of it had been blown away, is much or  
2 is significantly larger than the average brain.

3 Does anything seem incorrect or unusual to you in  
4 those figures or that analysis?

5 A I don't think so. I would not put too  
6 much emphasis on that, I don't think.

7 Q So even when a good portion of it is  
8 blasted away, after having been set in formalin,  
9 the 1,500 grams is not an unusual--

10 A I don't think so.

11 Q Could we look at the ninth view, please?  
12 This corresponds to black and white photographs  
13 Nos. 20, 23, 24, 25, and color photographs Nos. 50,  
14 51, and 52. It's described in the 1966 inventory  
15 as the "superior view of the brain."

16 The first question is: Do the photographs  
17 appear to you to be accurate representations of the  
18 brain as you observed it at the time of the  
19 supplementary examination?

20 A Yes.

21 Q Dr. Boswell, I'd like to show you a  
22 document that is marked as Exhibit No. MI 12, which

1 is one of the Rydberg drawings from the Warren  
2 Commission report. Notice that in Exhibit MI 12,  
3 the bullet appears to be going in a straight line  
4 through the brain. Are you able to tell by  
5 examining the superior view of the brain in the  
6 ninth view whether the bullet, in fact, proceeded  
7 in a straight line?

8 A No. I don't think there's any way of  
9 making that determination.

10 Q Was it possible to determine the course of  
11 the bullet through the skull by an examination of  
12 the brain?

13 A Not of the brain. It was a little bit  
14 easier by examination of the skull, but the right  
15 hemisphere of the brain is just so torn up, and  
16 there's no way of determining a track. But we did  
17 find--we have a good wound of entrance, and then we  
18 have metallic fragments, I believe in the--around  
19 the right orbit. So that gives some sense of  
20 direction as far as the shooter.

21 Q By examining the brain by itself, are you  
22 able to determine to a reasonable degree of medical

1 certainty whether there was one or more than one  
2 bullet wound to the head? Again, just by  
3 examination of the brain.

4       A     The only clue, I think, is the fact that  
5     the scalp is reasonably well intact, and we only  
6     have one wound of entrance on the scalp. And by  
7     the same token, we only have one wound of exit.  
8     It's huge, but--now, if he was shot with this one  
9     from behind first and then shot secondly in the  
10    same place with a second one, that would be  
11    impossible to tell. But then you would have to  
12    have another wound of exit someplace, which you  
13    don't have.

14       Q     Would you be able to make any of those  
15    determinations solely by examining the brain  
16    without reference to the scalp or skull?

17       A     I don't think so.

18           Well, another factor in favor of only one  
19    weapon or one shot entering the brain is the  
20    reasonably limited destruction of the brain. I  
21    mean, even though it's catastrophic, still, look at  
22    the intact left lobe and the intact cerebellum.

1 So, really, it's the right cerebellar hemisphere--  
2 or cerebral hemisphere that's damaged.

3 Q In your answer to a previous question, you  
4 made reference to the exit wound in the skull. Did  
5 you ever see any evidence of any beveling in the  
6 skull at the point where you determined there was  
7 an exit wound?

8 A At the time of autopsy we didn't. But  
9 then when we reviewed the photographs, some of that  
10 beveling in the skull is equivocal, and obviously  
11 we weren't able to tell.

12 Q So would it be fair, then, to say that you  
13 determined during the course of the autopsy where  
14 the beveling was at the entrance wound, but you  
15 could not determine any beveling at the exit wound?

16 A That's true.

17 MR. GUNN: Okay. We can go to the X-rays.  
18 Well, let's take a break first.

19 [Recess.]

20 MR. GUNN: We're back on the record.

21 BY MR. GUNN:

22 Q We're now going to be looking at X-ray No.

1       1, anterior-posterior view of the skull. I think  
2 that is inverted left to right, if we can switch.

3             Dr. Boswell, are you able to determine  
4 with any degree of certainty whether the X-ray that  
5 you're looking at now is an X-ray of President  
6 Kennedy?

7       A     I have not seen this in an awful long  
8 time, but it certainly looks like what I remember.

9       Q     Let me draw your attention to a white  
10 semicircular marking in what appears to be in the  
11 right orbit, and I'll say that's on the left side  
12 of the X-ray as we're looking at it now. Do you  
13 see that white apparently radio-opaque object?

14      A     Yes.

15      Q     Do you know what that object is?

16      A     No.

17      Q     Do you know whether that is an artifact  
18 that is just there as part of either the developing  
19 process or whether that is a missile fragment?

20      A     No, I can't tell you that. I don't  
21 remember the interpretations. I see a lot of  
22 metallic-looking debris, X-ray-opaque material, at

1 the site of the injury. And I remember that there  
2 were a lot of fragments around the right eye, and  
3 the rest of these could be from bullet fragments as  
4 well. I'm not sure--we found a couple of very  
5 minute metal fragments, but I do not relate them to  
6 the X-ray.

7 Q Can you relate that, again, apparently  
8 large object to any of the fragments that you  
9 removed?

10 A No. We did not find one that large. I'm  
11 sure of that.

12 Q Okay. Could we look at X-ray--

13 A I had forgotten about the tremendous  
14 fractures that were there.

15 Q Do you see anything about that X-ray--  
16 again, View No. 1--that would seem to be  
17 inconsistent with what you recall from the night of  
18 the autopsy?

19 A No. It's very consistent with the trauma  
20 to the head.

21 Q Could we look at X-ray No. 2, a right  
22 lateral view of the skull, with two angle lines

1 overdrawn on the film? Dr. Boswell, can you  
2 identify X-ray No. 2 as being an X-ray taken of  
3 President Kennedy on the night of the autopsy?

4 A Yes.

5 Q First, where on the X-ray that you're  
6 examining would you identify the bullet entrance  
7 wound?

8 A I don't think I can identify the entrance  
9 wound. I just need to move that.

10 I cannot identify the entrance wound here.

11 Q Do you recall if on the night of the  
12 autopsy you were able to identify the entrance  
13 wound in any of the X-rays?

14 A No--well, the entrance wound, no. I  
15 thought that there was a little bit of metallic  
16 material along one transverse process down here  
17 near the entrance wound in the back, but I don't  
18 see that in this X-ray. But this is all scattered  
19 around the exit wound in the head.

20 Mr. Gunn, I think we dug this piece out  
21 right here, but I'm not sure.

22 Q You're pointing to what looks like a

1 sliver near the--

2 A Right eye.

3 Q --front right above the eye?

4 A Right. Right supraorbital area. Because  
5 I think that's about the size, but I'm not sure.

6 Q If you could point to where on the X-ray  
7 you understand the entrance to have been even  
8 though you don't see it appearing on the X-ray.

9 A It must be around here someplace.

10 Q That would be--

11 A Has to be in this general area right here.  
12 The left, left side of the X-ray at the base of the  
13 skull, just a inch or so behind the vertebra.

14 Q I'd like to draw your attention to what  
15 appears to be, in my term, sort of a shelf-like  
16 disruption of the skull. Do you recall seeing that  
17 on the night of the autopsy? I will say, in a very  
18 inexpert way, it's near the cowlick area, although  
19 that's not a medical term, I understand. But do  
20 you understand? Did you observe anything in that  
21 area on the night of the autopsy?

22 A No.

1           Q     Do you have any understanding as to what  
2 that shelf or plate is there?

3           A     You're talking about--I don't know what  
4 any of this is. But you're talking about this  
5 fractured line right here?

6           Q     In the first instance, just right on the  
7 periphery.

8           A     Right here?

9           Q     Yes.

10          A     Okay. Well, I recognize what that is.  
11 That's a depressed fracture.

12          Q     Does that depressed fracture correlate in  
13 any way to the entrance wound that you observed on  
14 the night of the autopsy?

15          A     I think it's a long way from it. I think  
16 that's quite a ways from the entrance wound.

17          Q     Do you see what appear to be radio-opaque  
18 trail, metal dust?

19          A     Yes.

20          Q     Going across the very top, I'd say the  
21 sixth, the top eighth of the skull, left to right,  
22 without indicating anything. Do you know what that

1       is, what those are?

2           A     Those are metallic fragments that have  
3     really dispersed. At some point, maybe when it  
4     entered, those perforated and went up, or maybe  
5     when it exited, those fragmented and fell there.

6           Q     Do the fragments tell you anything about  
7     the direction or the course of the bullet through  
8     President Kennedy's brain or skull?

9           A     Well, at first glance, that looks like a  
10    straight line. But then you've got fragments  
11    elsewhere in there, and I--that wouldn't be  
12    inconsistent with a track, but I think that those  
13    have fragmented off at some point where the bullet  
14    has hit something really hard and scattered. I  
15    don't think traveling through the soft tissue of  
16    the brain that tiny fragments are going to just  
17    spill off like that.

18          Q     Okay.

19          A     I don't think that's a track even though  
20    the fact that it's a straight line might suggest  
21    that.

22          Q     To an untrained eye such as my own, there

1 appears to be a large, dark space, almost as if  
2 it's a figure eight, in the frontal area, somewhat  
3 behind the eye and down into the cheek. Do you see  
4 that area that I'm referring to?

5 A Mm-hmm.

6 Q Can you tell me what that represents?

7 A Well, it looks almost like a pneumo-  
8 encephalogram where you got air in and displaced  
9 tissue, but--I suspect that that's what that is. I  
10 think that's a space with a lot of air in it.

11 Q So though it is darker, that does not  
12 signify that it is missing skull?

13 A Oh, I don't think--well, the missing skull  
14 is all over. Of course, the drawing we have there  
15 is sort of similar to that, isn't it?

16 Do we have an AP, one straight on?

17 Q Yes.

18 A What was the one I just--

19 Q The first one.

20 A The first one? May I look at that one  
21 again?

22 Yes, you're right. Here it is. See, this

1       is what's missing here.

2           Q     So you're pointing at what I would  
3 describe as the temporal and parietal bone on the  
4 right hemisphere? Is that--

5           A     I guess that would--actually, that looks  
6 like frontal there, doesn't it? Frontal, temporal,  
7 and some parietal. But that's where this space is  
8 here.

9               Now, you see, this is not in a straight  
10 line that it is here. It's not a straight line  
11 here. These are all scattered around.

12          Q     You're referring to the radio-opaque  
13 fragments.

14          A     Right, and I think probably the bullet hit  
15 up here. That might very well be that piece right  
16 there.

17          Q     You're referring to the large semicircular  
18 piece in the AP view--

19          A     Yes.

20          Q     --being the same as the one that appears  
21 to be in the frontal bone in the lateral; is that  
22 correct?

1       A    Right, and it's in a different  
2 perspective. Here it's narrow, but around--about  
3 the same size.

4       Q    Okay. If we could see the lateral one  
5 more time. I'd like to show you a portion from the  
6 autopsy protocol. Particularly make reference to  
7 the multiple minute metallic fragments along the  
8 line corresponding with the line joining the above-  
9 described small occipital wound and the right  
10 supraorbital ridge.

11      A    Okay. What's your question?

12      Q    Now, the question would be: Are the  
13 minute metallic fragments referenced in the autopsy  
14 protocol those fragments that go along the top of  
15 the AP?

16      A    Right.

17      Q    And I would just note that it says that  
18 "They're aligned corresponding with the line  
19 joining the above-described small occipital wound"--  
20 -the entrance wound--"and the right"--that doesn't  
21 say--when I said "entrance wound," that was my  
22 gloss to this.

1           A     Uh-huh.

2           Q     -- "and the right supraorbital ridge." To  
3 me, it appears as if the line does not correspond  
4 with an entrance wound, but would be elsewhere.

5           A     Is that from the autopsy?

6           Q     This is the autopsy protocol.

7           A     And this is--

8           Q     Now, I don't know that what is being  
9 referred to in the autopsy protocol is what is  
10 being referred to on this X-ray, but the question  
11 for you is: Is what you are seeing on the X-ray  
12 itself what is being referred to in the portion of  
13 the autopsy protocol that I just quoted?

14          A     Right. Although I interpret it  
15 differently now than whoever did that. I see the  
16 line here, but it doesn't connect with the wound of  
17 entry, although they say it does there. And  
18 apparently we gave this to the cops, O'Neill and  
19 Sibert.

20          Q     This is the autopsy protocol.

21          A     Yes. This is, too.

22          Q     Yes, right. But when you say you gave it

1 to the cops, I'm not sure. Sibert--

2 A To the FBI guys.

3 Q You mean you gave the X-rays?

4 A No. That fragment.

5 Q Oh, the fragment, okay. That's what  
6 wasn't clear. Okay.

7 Was there any other X-ray that you now  
8 recall having seen that showed a line of metallic  
9 fragments connecting to the small wound of entry?

10 A Not of the head.

11 Q Is the fragment trail that you see on the  
12 AP--excuse me, on the lateral X-ray, No. 2 that's  
13 in your hand, does that correspond to what you saw  
14 on the night of the autopsy, as best you recall?

15 A Yes.

16 Q Okay. I think that's it for the X-rays.

17 Dr. Boswell, if we could now shift from  
18 the time of the autopsy and the preparation of the  
19 supplementary autopsy report to the Warren  
20 Commission, I'd like to ask you whether you ever  
21 met with anyone on the Warren Commission staff?

22 A Yes.

1 Q Do you remember with whom you met?

2 A The Senator from Philadelphia, Hatch--  
3 or...

4 Q Arlen Specter.

5 A Arlen Specter. Sorry.

6 Q Hatch is from Pittsburgh. He was not a  
7 Senator at the time, though.

8 A No.

9 Q Did you meet with anyone else on the  
10 Warren Commission staff in addition to Mr. Specter?

11 A He was the only one I worked with. We  
12 appeared before the full Commission and met all of  
13 them, and they asked us questions.

14 Q Approximately how many times did you meet  
15 with Mr. Specter?

16 A It seemed like an awful lot, but probably  
17 it was no more than three or four times.

18 Q What kinds of things did you discuss with  
19 Mr. Specter?

20 A Well, we--I think he told us more than we  
21 told him. He would bring us information and then  
22 ask us how it fit the autopsy. And he showed us

1 the clothes. He showed us the Zapruder film a  
2 couple of times. That's all I can remember,  
3 although it seemed like an awful lot of times we  
4 met with him.

5 Q Did he ever suggest to you that you change  
6 any of your testimony or to report something  
7 different from how you understood it?

8 A No.

9 Q Were you aware of any other person making  
10 a contact with you in relationship to the Warren  
11 Commission who suggested that you change your  
12 testimony in any way to correspond with any other  
13 ideas they might have?

14 A No.

15 Q Very early on in your deposition today,  
16 you made reference to Mr. Eardley from the Justice  
17 Department asking you to go to New Orleans; is that  
18 correct?

19 A Mm-hmm.

20 Q What did he say to you about the reason he  
21 wanted you to go to New Orleans?

22 A He was really upset. He says, "J, we got

1 to get somebody in New Orleans quick. Pierre is  
2 testifying, and he's really lousing everything up."  
3 And I called Jim to see if he didn't want to go,  
4 and he was having--his mother-in-law was ill, and  
5 he couldn't go. So they put me on a plane that day  
6 and took me to New Orleans, and that was one of the  
7 most interesting adventures of my life. I met--do  
8 you want to hear all of this?

9 Q Yes, please.

10 A Carl Eardley sent me to a hotel, and I  
11 went into the hotel and registered. I was already  
12 registered. I got up to my room, and there was a  
13 note on my bedside table telling me to meet  
14 somebody at a certain place at a certain time. And  
15 this was a scary place. This was down around the  
16 wharfs, and the federal attorney's office was in a  
17 big warehouse down there. And that's--I met  
18 somebody on the street. He took me in there, and  
19 then they told me what was going on. They showed me  
20 the transcript of Pierre's testimony for the past  
21 couple of days, and I spent all night reviewing  
22 that testimony. And it was this bit about the

1 general. Jim said, "Who's in charge here?" And  
2 when they asked Pierre in court who supervised and  
3 ran the autopsy, he says, "Some Army general." And  
4 so that is why--and I never appeared. I spent two  
5 days down there and then came home, never appeared  
6 in court. And the government won their case.

7 Q Actually, the government was the district  
8 attorney. So my next question for you actually  
9 was: What was the United States Department of  
10 Justice doing in relationship to a case between the  
11 district attorney of New Orleans and a resident of  
12 New Orleans?

13 A Well, they--I went over and met somebody,  
14 some lawyer in another firm that night, and I don't  
15 know who he was representing. But, obviously, the  
16 federal attorney was on the side of Clay Shaw  
17 against the district attorney.

18 Q Do you remember the name of that federal  
19 attorney?

20 A No. I have no idea.

21 Q Was it Harry Connick?

22 A It could very well have been. That name

1 sounds--of course, Connick is not an uncommon name.  
2 It could have been.

3 Q Do you recall meeting with an attorney  
4 named Wegman?

5 A No.

6 Q Or Dymond?

7 A Thirty years ago, no, I can't remember  
8 that.

9 Q What did the government attorney say to  
10 you? Did he help prepare potential testimony for  
11 you?

12 A They were getting ready to. I guess it  
13 all depended on what Pierre did that next day or  
14 something. I don't know. All I know is that they-  
15 -he was answering in very strange ways their  
16 questions, and, yes, they sent me down and talked  
17 to me and tried to get me to agree that he was very  
18 strange and that I could do a better job or  
19 something.

20 Q Did you ever talk to Dr. Finck about his  
21 testimony?

22 A No.

1           Q     Did you ever talk to him at all after that  
2 point?

3           A     Oh, yes, many times. Pierre's wife was  
4 there with him, and he was staying in the same  
5 hotel I was. And so we met just by chance at  
6 breakfast the day after I arrived. And we didn't  
7 discuss why I was there. I'm sure he asked me, and  
8 I don't know what I told him. But, anyway, we have  
9 met on a number of occasions since then. His  
10 daughter is in this country, and she was going to  
11 school in Missouri for several years. And I used  
12 to--they'd stop by here and visit with us as they  
13 were on their way. We were very good friends.

14          Q     Do you have any idea why he was answering  
15 the questions the way he was in the Clay Shaw  
16 trial?

17          A     Well, you'll know when you meet him, if  
18 and when you meet him. He is a very strange--but a  
19 sharp guy. He was a good pathologist, a hard  
20 worker. He was devoted to the United States and to  
21 the Army despite the fact that he was going back  
22 home. But he's a strange guy. I knew that long

1 before we invited him over to help us on this  
2 autopsy. He's just a strange fellow.

3 Q Do you recall who paid for your trip to go  
4 to New Orleans?

5 A I would assume that the Justice Department  
6 provided my plane tickets and my hotel bill.

7 Q Other than for this experience in New  
8 Orleans, were you contacted at any other point by  
9 any representative of the U.S. Government to  
10 provide assistance for the government in regard to  
11 the Kennedy autopsy?

12 A No. But aside from that, Carl Eardley  
13 called me when King was assassinated and said, "J,  
14 we got a problem down in Memphis. They're alleging  
15 that we're letting the Reverend die." And then he  
16 called me back and said, "He died. Would you go  
17 down there and supervise the autopsy?" And I said  
18 I'm the last--by this time, it had been several  
19 years, and we'd had an awful lot of stuff about the  
20 autopsy. And so I said, "I'm the last one you want  
21 to go down." And I gave him the name of the guy  
22 who was at that time the neuropathologist--I knew

1 what they were going to find because he had been  
2 shot in the neck and the spinal cord was severed.  
3 And I gave him the name of the neuropathologist at  
4 the AFIP, and he called him and got him to go.

5 That's the only other incident relative to  
6 that.

7 Q Earlier in the deposition, you made  
8 reference to a letter that you sent, I believe to  
9 Mr. Eardley, suggesting that a panel be created to  
10 review some of the autopsy material. Could you  
11 describe for me what circumstances led to your  
12 writing that letter?

13 A This was--had to be '68, maybe. I'm not  
14 sure when it was. And he just called me out of the  
15 blue and said he thought it was a good idea--said  
16 they thought it was a good idea to have an  
17 independent panel. I believe that's what it was.

18 Now, I had been talking about this with  
19 perhaps him and other people, Jim particularly,  
20 that now that all the material was back, that it  
21 should be reviewed, if they're not going to. And  
22 whether Carl suggested it or whether I convinced

1 him, I'm not sure. But, anyway, he was willing to  
2 accept the letter, which he essentially described  
3 to me what they wanted, and I wrote it.

4 You have a copy of that, do you not?

5 Q Not your letter to him. We have the  
6 report from the Clark Panel, but I haven't seen  
7 your letter to Mr. Eardley.

8 A I can provide you a copy of that if you  
9 would like.

10 Q Yes. Yes, I would. Was your letter to  
11 Mr. Eardley?

12 A Yes. I'm almost positive--I'm sorry. I  
13 wrote that to the Justice Department. I rather  
14 think it was--because as I sit here, I sort of  
15 think I wrote to Mr. Eardley relative to our recent  
16 conversations and so forth. So I think I...

17 Q I'd like to show you the document that  
18 ended up coming from--it's called the Clark Panel  
19 Report. I'm showing you a copy of Exhibit 59,  
20 which is the Clark report. Have you previously  
21 seen the document that's now marked Exhibit 59?

22 A Yes.

1           Q     Other than writing the letter that helped  
2 prompt the creation of the Clark Panel, did you  
3 have any further role in conjunction with the  
4 panel?

5           A     I was there at the time they met and went  
6 over the material. I guess we had lunch together  
7 and discussed the case and so forth.

8           Q     Was anyone else from the autopsy present  
9 with the Clark Panel, such as Dr. Humes or--

10          A     Jim was there. Finck may very well have  
11 been. I'm not sure. And I sort of think Eberhart  
12 was there, but I'm not sure.

13          Q     Ebersole?

14          A     Ebersole. This was the good panel. We  
15 met with a couple of panels. This one were all  
16 people that, for some reason, Jim and I knew. Not  
17 that we had anything to do with selecting them, but  
18 these guys--well, we did know Oscar Hunter and Russ  
19 Fisher.

20          Q     I'd like you to turn to page 14 of Exhibit  
21 59, the bottom paragraph, the first sentence of  
22 which reads, "One bullet struck the back of the

1 decedent's head well above the external occipital  
2 protuberance."

3           Did you have any discussions with members  
4 of the Clark Panel about the entrance wound  
5 location for the skull wound?

6       A    We had a lot of discussion with them.

7       Q    Did you understand or did you ever come to  
8 believe that the Clark Panel located the entrance  
9 wound at a point superior to where you had  
10 identified the entrance wound in the autopsy  
11 protocol?

12      A    I never believed this. I think Jim at one  
13 point came to believe this, because he testified  
14 before the House commission to that effect, I  
15 think. But if you can believe that photograph that  
16 we were just looking at, this is not true, because  
17 that is way below the point they're indicating.

18      Q    So, in other words, when you say that this  
19 is not true, you're referring to the portion that I  
20 just read to you?

21      A    Right, from the Clark commission.

22      Q    About how much time did you spend with the

1 Clark Panel members?

2 A At least a half a day, maybe all day.

3 Q What was the principal purpose that you  
4 understood they were trying to perform?

5 A Just review the material that was  
6 available and see if their conclusions were  
7 different or the same or similar to ours.

8 Q Did you ever meet with anyone from the  
9 Edgewood Arsenal in regard to the autopsy of  
10 President Kennedy?

11 A No. I know that they did a lot of  
12 ballistic work down there, and Pierre had worked  
13 there or had been stationed there. But I did not  
14 have anything to do with them.

15 Q Do you recall, for example, meeting anyone  
16 connected with Edgewood Arsenal in conjunction with  
17 your testimony before the Warren Commission?

18 A No.

19 Q Do you ever recall showing any of the  
20 autopsy photographs or X-rays to anyone other than  
21 may have happened in conjunction with the Clark  
22 Panel or the House Select Committee on

1 Assassinations?

2 A Would you repeat that?

3 Q Sure. Other than with the Clark Panel and  
4 the House Select Committee on Assassinations, have  
5 you ever met with any other people and shown them  
6 photographs of the autopsy?

7 A No. I've never had available X-rays or  
8 photographs.

9 Q Did you yourself ever communicate directly  
10 or indirectly with any of the following people  
11 about the autopsy: First, Robert McNamara?

12 A No.

13 Q Robert Kennedy?

14 A No.

15 Q Jacqueline Kennedy?

16 A No.

17 Q Admiral Burkley?

18 A No.

19 Q President Johnson?

20 A No.

21 Q I'd like to give you an opportunity now to  
22 provide any kind of statement, if you wish to make

1 one, about the autopsy or anything that you think  
2 could help clarify things. But I'd like to take  
3 care of two short pieces of business first.

4                 First, Doug Horne has drawn black lines  
5 over the markings that you made on the skull, and  
6 I'd like to ask you if that appears to you that  
7 those are reasonably accurate overdrawings on  
8 yours, understanding still that these are just  
9 approximate dimensions of the wound.

10          A     And not meant to be precise, but just show  
11 magnitude and relative position.

12          Q     Sure. I wonder if I could ask you just to  
13 initial the skull.

14          A     I hate to do this. It doesn't matter  
15 where, I guess.

16          Q     It doesn't matter where.

17          A     Date?

18          Q     And the date, February 26th. Thank you  
19 very much.

20                 [Discussion off the record.]

21                 BY MR. GUNN:

22          Q     Dr. Boswell, is there anything that you

1 would like to say that you think might help clarify  
2 or explain anything that you had to do with the  
3 autopsy of President Kennedy?

4 A I can't think of anything.

5 MR. GUNN: Okay. I'd like to thank you  
6 very much for your time and patience. We  
7 appreciate your coming today. Thank you.

8 THE WITNESS: It's been relatively  
9 painless. Thank you very much for my lunch.

10 [Whereupon, at 4:15 p.m., the deposition  
11 was concluded.]

*CERTIFICATE OF DEPONENT*

I have read the foregoing 221 pages which contain  
the correct transcript of the answers made by me to the  
questions therein recorded.

J. Thornton Bowe M.D.

\* \* \*

Subscribed and sworn before me this

15<sup>th</sup> day of March, 19 96.

  
Notary Public in and for

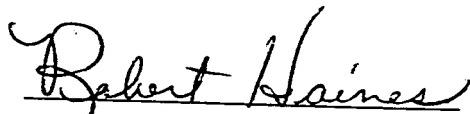
Melanie Mitchell

Montgomery County MD

My commission expires 1-1-98.

## CERTIFICATE OF NOTARY PUBLIC

I, ROBERT HAINES, the officer before whom the foregoing deposition was taken, do hereby testify that the witness whose testimony appears in the foregoing deposition was duly sworn by me; that the testimony of said witness was taken by me stenographically and thereafter reduced to typewriting under my direction; that said deposition is a true record of the testimony given by said witness; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this deposition was taken; and further, that I am not a relative or employee of any attorney or counsel employed by the parties hereto nor financially or otherwise interested in the outcome of the action.



ROBERT HAINES

Notary Public in and for  
the State of Maryland

My commission expires: March 18, 1998